

STRATEGIES TO SUPPORT SUSTAINED LEARNING IN OPEN DISTANCE AND E-
LEARNING IN A SOUTH AFRICAN CONTEXT

by

Nancy Tafirenyika

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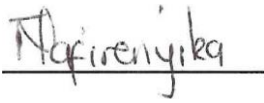
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SUPERVISOR: PROF G VAN DEN BERG

30 October 2020

DECLARATION

I declare that **STRATEGIES TO SUPPORT SUSTAINED LEARNING IN OPEN DISTANCE AND E-LEARNING IN A SOUTH AFRICAN CONTEXT** is my work and that all the sources that I have used or quoted have been indicated and acknowledged using complete references.

A handwritten signature in dark ink, appearing to read 'N Tafirenyika', is written over a horizontal line.

N Tafirenyika

30/10/2020

Date

DEDICATION

I dedicate this writing to my loving father the late Noah Chamwaita Maheya aka Agoya for one of his last wishes was to educate me. Rest in peace dad I have done it and I will never forget your inspirational words. I will always love you.

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I would first like to thank the Almighty God for giving me the strength to endure throughout the whole research project. I would also like to thank the following individuals for their support and contribution to this research project

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ABSTRACT

The worldwide growth of open distance and e-Learning cannot be denied, nor can it remain unnoticed. In the South African setting, which is the focus of this study, the increasingly high demand for higher education has also led to the development of distance education. However, the throughput rate for this mode of education has been consistently unimpressive for over a decade and this has led to high dropout rates. There is cause for concern regarding how best to assist students and improve throughput. Therefore, this research has focused on identifying strategies that can be incorporated to support sustained learning in South African ODeL. It considers issues such as the social inequalities, previous disadvantages, and ICT affordances that characterise South African ODeL students.

This research took a qualitative research approach, using a case study that was conducted as a dissertation of limited scope. The aim was to unveil the best approaches that could be incorporated in South African ODeL in order to support sustained learning. The study attempted to understand such strategies, based on students' perceptions and reflections on their experiences while studying first-level modules in distance education. The case for this research study was the University of South Africa (UNISA), where eight student participants were interviewed, using semi-structured interviews to collect data.

The findings of this study revealed that there are some readily available resources that the institution and instructors can use to promote sustained learning and improve student throughput. This research recommends frequent student surveys to discover student needs and the challenges that they experience. It also recommends improved communication with students, provision of financial aid, development of open educational resources (OERs), ensuring rapid delivery of study material, and the use of different methods of delivering learning content.

It is important to note that the findings of this dissertation are of limited scope and cannot be generalised to the issues affecting the majority of South African ODeL students – this because the study was carried out at one institution and involved just one module and eight participants. However, these findings have the potential to enlighten ODeL stakeholders as to matters affecting some of their students. The findings could also provide valuable information for future large-scale research.

Key concepts: dropouts, open distance learning, e-Learning, strategies for teaching and learning, sustained learning, student support.

NGAMAFUPHI

Ukudlondlobala kohlelo kohlelo lwemfundo evulekile nokufunda kude kanye nohlelo lwe-inthanethi akunakuphikiswa, futhi angeke kwathathwa sengathi akunakiwe. Ngokwesizinda seNingizimu Afrika, esiyindikimba yalolu cwaningo, izinga elikhulayo lokufuneka kwemfundo ephakeme nakho sekuholele ekukhuleni kwemfundo yokufunda ukude. Yize-kunjalo, izinga legalelo lalolu hlelo lwemfundo kudala lubonakala lungeluhle esikhathini esingaphezu kweminyaka eyishumi kanti lokhu sekuholele ekutheni kwehle izinga labafundi abayeka ukufunda. Kunomnako mayelana nendlela nokuthi abafundi bangancedwa kangcono kangakanani ukuze bathuthukise izinga labo lokusebenza. Ngakho-ke, lolu cwaningo selugxile ekutholeni amasu lawo angasetshenziswa ukuxhasa imfundo esimelele ohlelweni lwe-ODeL lwaseNingizimu Afrika. Lokhu kufaka izindaba ezinjengokungalingani komphakathi, ukuncishwa kwamathuba esikhathini esedlule, kanye nokwazi ukukhokhela uhlelo lwe-ICT okuwuhlelo oluyinsika kubafundi bohlelo lwe-ODeL eNingizimu Afrika.

Lolu cwaningo lulandele indlela yocwaningo eyencike kwizinga lengxoxo (*qualitative*), ngokusebenzisa ucwaningo lotho olwenziwa njengedezetheshini enobukhulu obunqunyiwe. Inhloso kwaye kuwukuveza izindlela ezingcono ebezingafakwa kwi-ODeL yaseNingizimu Afrika, ukuxhasa imfundo imfundo esimelele. Ucwaningo beluzama ukuzwisisa amasu anjalo, asuselwa phezu kwemiqondo yabafundi kanye nokubheka ulwazi lwabo kube ngakolunye uhlangothi bafunda omojuli besigaba sokuqala sohlelo lwemfundo yokufunda kude. Ucwaningo lotho lwalesi sifundo lwenziwa eNyuvesi yaseNingizimu Afrika (UNISA), lapho abafundi abayisishiyagalombili befakwa imibuzo yenhlolovo, ngokusebenzisa inhloolovo yesakhiwo sikanxambili ngenhloso yokuqoqa idatha.

Ulwazi olutholwe yilolu cwaningo luye lwaveza ukuthi kunemithombo elungisiwe esesimeni esifanele engasetshenziswa yiziko kanye nabayaleli ukuthuthukisa uhlelo lokufunda olusimelele kanye nokuthuthukisa umsebenzi wabafundi. Lolu cwaningo luncoma amasaveyi enziwa njalo abafundi ukubona izidingo zabafundi kanye nezinselelo abafundi abahlangabezana nazo. Ucwaningo luphinda futhi luncoma uhlelo oluhle lokuxhumana nabafundi, ukuhlinzekwa ngosizo lwezimali, ukuthuthukiswa kwemithombo yemfundo evulekile (OER), ukuqinisekisa kohlelo olusheshayo lokuhlinzekwa

ngomatheriyeli wokufunda, kanye nokusebenzisa izindlela ezahlukene zokwethula indikimba yokufundwayo.

Kubalulekile ukukhumbula ukuthi ulwazi olufunyenwe lwedizetheshini wulwazi oluncane olubekelwe imingcele kanti lolu lwazi angeke lwafaniswa nodaba oluthinta iningi labafundi base-ODEL yaseNingizimu Afrika – lokhu kungenxa yokuthi ucwaningo lwenziwa kwiziko elilodwa futhi lwaxuba umojuli owodwa kanye nabadlalindima abayisishiyagalombili. Yize-kunjalo, lolu lwazi olutholakele lunethuba lokukhanyisela abasebenzisani njengezinto ezithinta abanye babafundi. Ulwazi olutholakele belunganikeza ulwazi olusemqoka mayelana nocwaningo olubanzi olungenziwa esikhathini esizayo.

Amagama asemqoka: abafundi abayeka ukufunda, uhlelo lwemfundo lokufunda ukude, uhlelo lokufunda nge-inthanethi, amasu okufundisa nokufunda, uhlelo lokufunda olusimelele, uxhaso lwabafundi.

OPSOMMING

Wêreldwyd het oopafstand- en e-leer groei ervaar wat nie ontken kan word of ongesiens kan bly nie. In die Suid-Afrikaanse konteks, wat die fokus van hierdie studie is, het die toenemende vraag na hoër onderwys ook tot die ontwikkeling van afstandsonderrig gelei. Die slaagsyfer vir hierdie vorm van onderrig is egter al vir langer as 'n dekade deurlopend onindrukwekkend, en dit het tot hoë uitsaksyfers gelei. Daar is rede tot kommer rakende die beste maniere om studente by te staan en die slaagsyfer te verbeter. Die fokus van hierdie navorsing was daarom op die identifisering van strategieë wat geïnkorporeer kan word om volgehoue leer in Suid-Afrikaanse oopafstand- en e-leer te ondersteun. Die volgende kwessies is ondersoek: die sosiale ongelykhede, benadeling in die verlede, en IKT-status wat met Suid-Afrikaanse oopafstand- en e-leer-studente geassosieer word.

'n Kwalitatiewe navorsingsbenadering is gevolg; 'n gevallestudie wat uitgevoer is, is in die verhandeling van beperkte omvang gebruik. Die doel was om die beste benaderings te bepaal wat in Suid-Afrikaanse oopafstand- en e-leer geïnkorporeer kan word om volgehoue leer te ondersteun. Tydens die studie is daar gepoog om sodanige strategieë te verstaan op grond van studente se persepsies en hul refleksie op hul ervarings terwyl hulle eerstejaarmodules deur afstandonderrig studeer het. Die geval wat in hierdie navorsing bestudeer is, is dié van die Universiteit van Suid-Afrika (Unisa), waar daar semi-gestruktureerde onderhoude met agt studentedeelnemers gevoer is om data in te samel.

Die bevindinge van hierdie studie het getoon dat daar geredelik beskikbare hulpbronne is wat deur die instelling en die onderriggewers ingespan kan word om volgehoue leer te bevorder en die studente se slaagsyfers te verbeter. Op grond van hierdie navorsing word aanbeveel dat opnames gereeld onder studente gemaak word om hulle behoeftes en uitdagings te bepaal. Verdere aanbevelings sluit in verbeterde kommunikasie met studente, voorsiening van finansiële steun, ontwikkeling van oop opvoedkundige hulpbronne, versekering van spoedige lewering van studiemateriaal, en die gebruik van verskillende metodes om leerinhoud te lewer.

Dit is belangrik om te besef dat die bevindinge van hierdie verhandeling beperk in omvang is en nie veralgemeen kan word om die kwessies in te sluit wat die meerderheid van Suid-Afrikaanse oopafstand- en e-leer-studente raak nie – aangesien die studie by een instelling uitgevoer is en slegs een module en agt deelnemers behels het. Hierdie

bevindinge het egter die potensiaal om vir oopafstand- en e-leer-belanghebbers lig te werp op kwessies wat sommige van hul studente raak. Die bevindinge kan ook waardevolle inligting vir toekomstige grootskaalse navorsing oplewer.

Sleutelkonsepte: uitsakkers, oopafstandleer, e-leer, strategieë vir onderrig en leer, volgehoue leer, studente-ondersteuning.

ABBREVIATIONS

BED	Bachelor of Education
BSc	Bachelor of Science
CD	Compact Disc
CHE	Council on Higher Education
DE	Distance Education
DHET	Department of Higher Education
DL	Distance Learning
DVD	Digital Video Disc
FET	Further Education and Training
HEQC	Higher Education Quality Committee
HEQF	Higher Education Qualifications Frameworks
HEQSF	Higher Education Qualifications Sub-Framework
ICT	Information and Communications Technology
IOL	Independent Online
LMS	Learning Management System
NADEOSA	National Association of Distance Education and Open Learning in South Africa
ODeL	Open Distance and E-Learning
ODL	Open Distance Learning
OERs	Open Education Resources
QCTO	Quality Council for Trades and Occupations
SADC	South Africa Development Community
SAQA	South Africa Qualifications Authority
STEM	Science, Technology, Engineering, and Mathematics
UJ	University Johannesburg
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNISA	University of South Africa
ZOU	Zimbabwe Open University

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CHAPTER 1

ORIENTATION AND BACKGROUND

1.1 INTRODUCTION

Strategies to support sustained learning in open distance and e-Learning (ODeL) in a South African context is the least researched and least discussed topic in the published journals and books that concentrate on ODeL. However, this mode of educational delivery is playing a huge role in providing access to higher education to those who cannot attend conventional institutions. ODeL is a contemporary model of Open Distance Learning (ODL) that incorporates online teaching and learning strategies to provide interaction between instructors and students. It is currently considered the most variable way of learning. “Open and distance learning provides an innovative strategy and praxis for developing and newly industrialised countries to reach their educational and socio-economic objectives” (Van Zyl, Els & Blignaut, 2013:85).

According to Darinskaia and Molodtsova (2019:115-117) in ODeL settings, teaching and learning are meant to be executed over the Internet, and students are offered flexibility and control in terms of time, place, and the pace of studying. On the other hand, United Nations Educational, Scientific, and Cultural Organisation (UNESCO) (2002:7) defines ODL as approaches that provide open access to education and training and do not constrain students to time and place, offering flexible learning opportunities for students. Both ODeL and ODL emerged from Distance Education (DE), which is also known as Distance Learning (DL) and is described by Newby, Stepich, Lehman, and Russell (2000:210) as arranged teaching programmes where teachers and students are separated by distance. Although ODeL and ODL redefined the concept of DE, they did not replace it some DE institutions do not offer open distance learning.

ODeL emerged from DE because of technological advancements. Bates (2005:6-7) gives an account of the technological advancements that occurred during the three generations of DE, namely the correspondence generation, the telecommunication generation, and the information and communication technology (ICT) generation which offers two-way communication through the Internet between instructors and students. The ICT generation

is the current generation of DE where technology is incorporated within the teaching and learning programmes which resulted in the emergent of ODeL. In this ODeL model, some students complete their qualifications, while others drop out before completing the qualifications. The minister of higher education expressed his concern "the throughput rates in distance university provision have been disappointing... and there have been examples in the past of large enrolments in programmes of low quality that do not develop the expected graduate competencies, and which do not address national needs" (Department of Higher Education and Training (DHET 2014:11). John (2013) from the Mail and Guardian, a South African national newspaper, mentions that the official data released by the Council on Higher Education (CHE), shows that in 2013, 68% of the University of South Africa (UNISA) students dropped out without graduating. The CHE is a statutory body that advises the Minister of Higher Education and UNISA is a prominent ODeL institution in South Africa. Similarly, Govender (2016) from the same newspaper says in 2005, 42% of students who were enrolled in South African open distance learning, dropped out after one year of studying and 10 years later, in 2015 at least three-quarters had dropped out. As pointed out, "according to the report on drop-outs, which was compiled by the Department of Higher Education and Training, the drop-out rate of distance-mode institutions is unacceptably high" (Govender, 2016).

Therefore, this research was aimed to discover the procedures and best practices for promoting sustained learning and student retention, particularly to students in the foundation years studying the first-year modules. This is ascribed to the statistics mentioned above, which reported that almost half of the students enrolled in open distance learning dropped out after their first year. Through the analysis of students' perspectives at UNISA, concerning their experiences during first-level modules, I was able to gain enlightenment on some of the causes of high drop-out rates. Based on students' opinions, this allowed me to provide information and recommendations, concerning strategies that could support sustained learning among ODeL students.

1.2 BACKGROUND TO THE STUDY

The integration of online teaching and learning is bridging the distance between the instructors and students in DE. This has resulted in the rapid increase of enrolments in DE over the last few years in South Africa. "The green paper for post-school education

and training states that in the past decade distance education accounted for nearly 40% of all public university enrolments" (John, 2012). This may be ascribed to the increase in demand for higher education while the few universities available are only able to accommodate few school leavers and university hopefuls. The Mail and Guardian (2012) reported that a woman was killed and seventeen were injured in a stampede at the University of Johannesburg (UJ) in a desperate attempt to claim university seats. This is a severe indication of how the country is struggling to cope with the demand for higher education. Additionally, Runji (2018) of the SowetanLive mentions that SA desperately requires additional universities owing to the rising demand for places. SowetanLive is the website of the Sowetan, a South African newspaper that was founded in 1981 as a liberation struggle publication.

Also, Thakali (2014) from the South African news and information website, the Independent Online (IOL), reported that the University of Johannesburg (UJ) received more than 75 000 applications from university hopefuls, but it could only accommodate 10 500 first-year students in 2014. Moreover, six years later Ntuli (2020) reported on IOL that the University of Pretoria registered slightly over 9 000 first-year students, however it had received about 37 000 applicants for 2020. Ntuli (2020) also reported that Sefako Makgatho Health Sciences University received 30 000 applicants but could only accept 1000 new students. These low numbers of students who are accepted by contact universities could be a contributing factor that more school leavers are now turning to DE to access higher education.

DE in South Africa was introduced over a hundred years ago. "Historical records show the phenomenon was conceived in Africa in 1873 when the University of the Cape of Good Hope was founded to undertake independent learning by degree candidates. The University of South Africa was thereby born as the first autonomous university in the world, in 1946, to offer Distance Education courses only" (Distance Learning South Africa, 2013).

Throughout the generations of DE in South Africa and internationally, significant developments concerning instructors and students' communication have occurred. Heydenrych and Prinsloo (2010: 8-9) present five models of generations of DE namely, Lauzon and Moore's (1989) model with four generations; Garrison's (1995) model with three generations; Guglielmo's (1998) model with three generations; Taylor's (1999 and

2001) model with five generations and Moore and Kearsley's (2005) model with five generations of DE. I expound on the Moore and Kearsley (2005) model because it is the most recent model. Heydenrych and Prinsloo (2010: 9) mention that in the Moore and Kearsley model of distance education, the first generation was the correspondence era where learning and teaching were done through the mailing system. This generation is not replaced by the next generations, ODeL still utilises the mailing system. Further, Heydenrych and Prinsloo (2010:9), discuss that the second generation was based on the opportunities provided by telecommunications, where television and radio broadcasting were introduced in teaching and learning in DE. Telecommunications redefined the concept of DE. Heydenrych and Prinsloo (2010: 9) present the third generation of the Moore and Kearsley model as the combined approach which still used the correspondence methods and utilising the telecommunication method.

Furthermore, Heydenrych and Prinsloo (2010: 9) explain that in the fourth generation of the Moore and Kearsley model the teaching and learning process provided suitable software to enable student-to-student and instructor-to-student interaction. According to Heydenrych and Prinsloo (2010:9), audio and videoconferencing were also promoted in the fourth generation. Lastly, as mentioned in Heydenrych and Prinsloo (2010:9) the fifth generation of DE in the Moore and Kearsley model introduced online service delivery characterised by multimedia interactive content where online communication and support are provided.

As described in Heydenrych and Prinsloo (2010:9), the fifth generation of Moore and Kearsley's (2005) model, is the present generation of DE because it is characterised by online learning and support. Similarly, Aoki (2012:1185) describes the fifth generation of DE from a technological perspective as a brilliant adaptable learning model grounded on the communication character of using the Internet. The fifth-generation is the generation where ODeL emerged and UNISA is moving in this direction with developments in DE. Abdullah and Mtsweni (2014:70), say that at UNISA each module has its online space on the myUnisa learning management system (LMS) with the main site where the lecturer engages with the students and a tutoring site for the e-tutors to communicate with students. Abdullah and Mtsweni (2014: 69) state that myUnisa is the LMS used by UNISA for academic and administrative purposes and can be accessed by instructors and students from anywhere at any time. I am also aware of online learning and eLearning at

UNISA through being an ODeL student at UNISA. As a Unisa student, I gained knowledge in my studies by integrating technologies such as computers, mobile phones, tablets, and Ipads. These technologies enable interactive online methods such as online tutoring, podcasts, and video conferencing to communicate with ODeL students.

Despite the above-mentioned developments in DE, South African ODeL nonetheless faces many challenges that hinder success amongst numerous students. Considering the statistics cited in the introduction section regarding high dropouts, and the statistics for the years 2011, 2012, and 2015 also published by the Council on Higher Education Trust (CHET:2015) graduation at UNISA did not reach 20% of its enrolments. Therefore, this proposed study intended to uncover the possible underlying causes of this problem.

1.3 THE CONTEXT OF STUDY

ODL has been part of South African higher education for many years. This study was conducted at UNISA, the largest and leading ODeL institution in South Africa which has long delivered education through the distance education mode for over 145-years. Makina (2018:1) confirms that UNISA started in 1873 as the University of the Cape of Good Hope and it was one of the first public universities in the world to teach exclusively through DE.

UNISA is amongst one of the largest comprehensive ODL institutions worldwide. Makina (2018:1) remarks that UNISA offers internationally accredited qualifications to about 350 000 students. According to (DHET 2019:85), in 2017 UNISA's overall enrolments were 344 015. Additionally, (DHET 2020:98) relates, that in 2018 UNISA enrolled 373 979 students. Furthermore, (DHET 2012:9) reports that in South Africa, the year 2009, UNISA enrolled a total of 279 744 students which was 88% of all DE enrolments. This increase in the enrolments at UNISA illustrates that many people are entrusting it to access higher education, therefore methods to improve the students' throughput are important. That being the case, I undertook this research to inquire about some of the problems that are leading to dropouts and low throughput in South African ODeL. UNISA was the case used for collecting data that involved the perception of students in the foundation years, regarding strategies that they think can support sustained learning.

Over the years of technological development, UNISA has been moving at the same pace with changes in society, regarding technological improvements. Currently, as mentioned in (UNISA 2016:4), learning material is also provided to students in digital format, however, printed learning material remains available. Additionally, Makina (2018:2) reveals that UNISA adopted e-Learning for education delivery as the method of delivery of education to achieve its vision of becoming the African University that shapes futures with humour, bridging the constraints on students and enhance interaction between the students and the institution, or students and the instructors. UNISA (2017:8) states that the third strategic objective at UNISA is to harness ICTs to support its practices to promote high performance and quality services to all its communities. These procedures taken by UNISA demonstrate its effort to promote the future success of its operations and better students' throughput by incorporating online learning. Therefore, additional information regarding student needs for success can assist UNISA to achieve its objectives to enhance student success which was the purpose of this study. This prompted the formulation of the research problem of this study, which is discussed next.

1.4 PROBLEM FORMULATION

As cited in the introduction section of this research report, ODeL is increasingly becoming a solution to the demand for higher education in South Africa. Many people, including young school leavers, are turning to this mode of learning to access higher education. However, only a low number of students who register, complete their qualifications. Based on the figures published by the (CHE 2018:9) and (CHE 2019:9) the graduation rate for the distance education mode did not reach 20% for the years 2012 to 2017. More importantly, according to the (CHE 2019:34 & 36), UNISA as the leading ODL institution in South Africa enrolled 34 4015 students in 2017 and 44 842 students graduated, leaving it with a graduation rate of 13%. Additionally, (DHET 2020:103) reports that the graduation rate for undergraduates in the academic 2018 at UNISA undergraduate certificates and diplomas was 21% and undergraduate degrees were 9.4%.

Reflecting on the performances of students at UNISA as provided by the CHE and DHET, one can note that there could be forms of disconnections between this ODeL institution and the students, leading to the low throughput and high drop-out rates. The possible reasons for the low throughput rate and high drop-out rate need to be investigated to raise

awareness to the South African ODeL institutions for them to align their pedagogical strategies according to their students' needs. However, to date, I could not find any research article that was conducted to specifically discover ways to improve students' throughput in South African DE, specifically to foundation years students enrolled for first-year modules. It could be that the topic was not investigated or perhaps the research was not published in DE books or journals. Therefore, this study is intended to identify strategies that can promote sustained and effective learning and success in South African ODeL.

I believe that the problem of high dropouts faced in South African ODeL can be reduced. However, this can only be accomplished through dedication and critical analysis to unveil the causes of the underlying problem and therefore, advise a strategic plan for possible future success. Pfeiffer, Goodstein, and Nolan (1989:5) support the need for strategic planning in an organisation. They state, "if you just want steady work, look for symptoms in an organization and help cure the symptoms; if you want to do what you are supposed to do, look at the symptoms and help find the problems" (Pfeiffer, Goodstein, & Nolan, 1989:5). Thus, I conducted this investigation as the foundation for discovering strategies that can support sustained learning amongst distance learners, particularly those studying first-year modules. This is because first-year modules are associated with students in the first year or foundation years of distance learning. Consequently, this can provide the basis for formulating best practices to support sustainable learning to distance education students. Sharma (2015) states, for ODLs to effectively serve the population, it needs national policies and regulations. Such policies and regulations can be established and entrenched, based on dedicated research that seeks to identify best practices for effective learning. Therefore, this research was conducted to discover strategies to promote sustained learning in South African ODeL and enlighten the stakeholders. The stakeholders can then consider implementing policies and regulations that correspond with the needs of the students.

1.5 RESEARCH QUESTIONS

Based on the revealed research problem in Section 1.4, the purpose of this research was to address this central research question:

What are the strategies for supporting sustained learning in Open Distance and eLearning in a South African context?

To assist in answering the main question, the following sub-questions were addressed in this study:

- What are the viewpoints of students about their learning experiences while studying first-year modules?
- How do the opinions of students influence their motivation to continue studying?
- What strategies do students suggest for a positive learning experience?

In this study, the purpose was to obtain student perceptions regarding the research problem.

1.6 AIM OF THE RESEARCH

Based on the above-listed research questions, this study is aimed at establishing strategies that can support sustained learning in Open Distance and eLearning in the South African setting.

Based on the main aim, the sub-aims below were investigated to:

- discover the viewpoints of students concerning their learning experiences while studying first-year modules.
- determine how the opinions of students influence their motivation to continue studying.
- Identify and recommend strategies that ODeL institutions can consider for bringing positive learning experiences to students.

1.7 LITERATURE REVIEW AND THEORETICAL FRAMEWORK

To become familiar with the research topic, I reviewed the literature. Bloomberg and Volpe (2012:75) explain that a literature review is performed to prevent unnecessary duplication of research, to refine one's research topic, and to acquire a better understanding of one's topic.

In the literature review for this current study, I analysed six previous investigations related to the research topic because I could not find literature on the research topic. These investigations focused mainly on challenges faced in ODL institutions. Of the six investigations, the first one was conducted in South Africa in 2012 and it investigated student access to and skills in using technology in the ODL context through students' enquiry. This research identified that challenges facing open distance learning students in South Africa are access to and the ability to use information and communication technologies. The second research also happened in 2013 in South Africa where the investigators compared the urban and rural dropout rates of DE students by analysing the university records. The findings showed that urbanisation has little effect on a higher drop-out rate for rural students over urban students. The third research also done in South Africa in 2014 collected the views of facilitators concerning their e-readiness on using ICTs in ODL through the deconstructive and internal criticism analysis. The study revealed that many of the facilitators lack the e-readiness skills to use ICT tools in ODL environments. Some facilitators did not comprehend what maintains ODL teaching and practices, additionally, the e-training for instructors was irregular and insufficient. The fourth investigation occurred in Ghana in 2014 where the researchers explored challenges faced by DE students at the university level through students enquiry. They discovered that students faced institutional, instructional, social, psychological, and financial challenges. The fifth investigation took place in Zimbabwe in 2015 with the researchers examining challenges faced by ODL students by enquiring from students. They found out that students mainly faced challenges of insufficient time to study, problems in accessing and using ICT, poor feedback, and inadequate study materials. The last investigation for the literature review was conducted in the Philippines in 2016 in this research the focus was to get the perspectives of the academics of the institution regarding the involvement of ICTs in teaching and learning. It emerged that most of the academics were resistant to consider new practices and directions in ODeL see Section 2.5.

In these investigations, I examined the methodology that researchers employed for conducting research and the findings that emerged see Section 2.5 and Table 2.1. In doing so, I was able to identify that the investigations did not mention anything about gathering the perspectives of students in the foundation years of ODL on the quest to solve challenges faced by students. Subsequently, I deduced a theoretical framework to use in this research. The theoretical framework incorporated three theories, namely symbolic interactionism, Ubuntu, and postcolonial indigenous ethical theories see Section 2.6. Creswell (2015:17) discusses that a theory acts as the lens that guides the research process. Therefore, the chosen theories underpinned this research. Further details of the literature review and the theoretical framework are discussed in Chapter 2.

1.8 RESEARCH DESIGN

A research design is an outline of how the research occurs. Reis and Judd (2000:17) define a research design as the systematic arrangement of an investigation to enable a valid conclusion. Yin (2003:19) states that a research design is employed to get from here to there, whereby 'here' is the initial stage where a set of questions need to be answered and 'there' is the stage where answers and conclusions are reached. Similarly, Aaker, Kumar, and Day (2004:73) define a research design as the detailed blueprint that guides the research study towards achieving its objectives.

To obtain a better understanding of the causes leading to dropouts, the research design for this study used an interpretivist paradigm and employed a qualitative approach using a case study. These will be discussed in the following section, commencing with the research paradigm.

1.8.1 Research paradigm

Creswell (2014:6) mentions that a paradigm is also referred to as a worldview, which contains a set of beliefs that guide the action. Bloomberg and Volpe (2012:28-30) identify four major paradigms that researchers can employ for investigations, which are post-

positivism, social constructivism, critical theory, and pragmatism. These paradigms are described in the next paragraph.

First, Bloomberg and Volpe (2012:28) discuss that post-positivism believes that there is a single reality and that this reality can be measured and known, thus, researchers basing their study on post-positivism use quantitative methods to measure this reality. Second, Creswell (2007:20) says that social constructivism/interpretivism believes reality should be interpreted because there is no single reality. Researchers applying this paradigm use qualitative methods to obtain multiple realities. Third, Creswell (2007:27) states that critical theory, also referred to as advocacy or a participatory framework is a paradigm that views the research connected with politics thus, advocacy is essential. Its focus is on social justice. Last, Bloomberg and Volpe (2012:30) clarify that pragmatism believes that realities are continually discussed and interpreted. Pragmatists believe that it is the best strategy to apply to fully understand the research problem. In this research, the most suitable paradigm is social constructivism or interpretivism. According to Bloomberg and Volpe (2012:28-29), in the interpretivist paradigm reality is multi-layered and complex, where people construct their social reality through their interpretations of the phenomenon. Also, Golafshani (2003:604) is of opinion that constructivism respects multiple realities that people have on a phenomenon. This paradigm assisted me to understand the phenomenon from the participants' views while exploring and understanding the situation inductively. A qualitative research approach was employed in this paradigm for conducting this investigation and is discussed in the next section.

1.8.2 Research approach

A qualitative research approach was used to conduct this study. Aaker et al (2004:73) mention that the choice of the research approach in a research project is the most important decision to make because it controls how the information will be gathered. Both Wiid and Diggins (2015: 64) and Creswell (2015:2) explain that qualitative research explores issues and seek to understand the occurrences from those affected by the phenomena. In this study, I embraced the qualitative approach to examine the research problem from the participants' views to get a better understanding. Jackson, Drummond, and Camara (2007:23-24) discuss that qualitative research is conducted when a complex and detailed understanding of an occurrence is required. A case study design was

employed within this qualitative research approach to examine problems faced by ODeL students in South Africa, it is discussed in the following section.

1.8.3 Research type

A case study is a method of investigating an occurrence that involves the collection of in-depth data within its natural setting. "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not evident" (Yin, 2009:18). Similarly, McMillan and Schumacher (2014:32) describe a case study as an in-depth examination of a bounded system grounded on data collected extensively. Eckstein (2002:124) defines a case as an occurrence that can report and interpret only a single measure on any relevant variable. McMillan and Schumacher (2014:32) also state that a case can be an occurrence or people bounded in time and space. This can, for example, be a learning situation or an organisation. For this study, UNISA was the case for investigating the challenges faced by students studying first-year modules within a South African ODeL context. A case study design was incorporated into this study to gain a thorough and deep investigation and exploration of a case, hence, enabling an intensive study. According to Crowe, Cresswell, Robertson, Huby, Avery, and Sheikh, (2011:1), a case study research approach is used to promote an extensive and diverse understanding of a complex issue in its natural setting. Therefore, a case study was used to ensure effective data collection which promotes a deeper understanding of the research problem. In the next section, I am providing the details of the research methods that were employed for data collection and analysis within this case study research type.

1.9 RESEARCH METHODS

This section discusses the techniques and procedures that were applied in the research process to ensure systematic data collection and analysis.

1.9.1 Selection of participants

The possible pool of participants for this study was taken from UNISA. The possible pool of participants is described in Mooi and Sarstedt (2011:37) as a population which is the

large collection of units that researchers are interested in, to make a judgment about something. Within this possible pool of participants is where the selected participants were picked. Selected participants are the subset of the possible pool of participants chosen to represent it., Accordingly, the selected participants were students who registered in 2018 and or 2019 for the first-level module called Linear Algebra Mathematics (MAT1503) to get their viewpoints concerning their experiences while studying the first-level module in ODeL.

Data was collected qualitatively by employing the stratified purposive sampling technique. McMillan and Schumacher (2014:429) define stratified purposive sampling as a technique that divides the possible pool of participants into subgroups and randomly selects participants from each group according to key aspects. Eight students' participants who were registered for MAT1503 in 2018 and or the first semester in 2019 were used. At the time of data collection, the study materials of the module MAT1503 were offered in both printed and digital form where students could access on the university website. Online education was also enabled on the discussion forum for the module on the university website where student-instructor and student-student interaction were promoted. Therefore, MAT1503 was suitable for this study of investigating strategies to support sustained learning in ODeL. I sought students who could fit within the three subgroups namely, students who passed MAT1503, students who failed and re-registered, and those who failed but did not register for it again. The aim was to communicate with five participants in each subgroup to reach a total of fifteen participants. I believed that collecting data from five participants in each subgroup would address the maximum variability of the learning experiences of students. Thus, I could identify factors that could either enhance or inhibit the successful completion of courses in South African ODeL from the viewpoints of those in the foundation years of ODeL. However, due to various factors such as a lack of trust in the research and an unwillingness to participate, only eight students agreed to participate. The profile of the participants is described in Section 4.2

To connect with the participants UNISA provided me with a list of one thousand one hundred and twenty-four students of which one hundred and thirty-eight had registered for MAT1503 in 2018 and nine hundred and eight-five in 2019. I randomly emailed one hundred and fifty students from both lists with university email accounts and invited them to participate in the research. I also joined the WhatsApp group which was created by

students for interaction. It is through the myLife email which is university student email accounts and through the WhatsApp group, where I succeeded in finding eight students who agreed to participate in the data collection. Among the eight participants, one was a drop-out who completely dropped UNISA studies, two were achievers who passed the module and five were students who failed and reregistered. However, amongst the five who failed and reregistered one dropped the module MAT1503.

The purpose of selecting students who had recently completed the first level modules to participate in this study was that if ODeL institutions manage to promote sustained learning and student retention on students in the foundation years, students may be able to master the skills of distance learning and therefore would be able to complete their studies. Consequently, the students' opinions, concerning strategies to sustain learning, was considered valuable to inform the stakeholders of what works for students. The selection of participants is discussed in more detail in Section 3.4.1 in Chapter 3.

1.9.2 Data collection

To gather data, semi-structured interviews were utilised in the qualitative approach to obtain information from the students regarding the research problem. McMillan and Schumacher (2014:381) define structured interviews as interviews that ask participants the same questions in the same order. On the other hand, Leedy (1997:199) explains that semi-structured interviews are like structured interviews, however, in semi-structured interviews researchers can probe to get more clarified information. In this research, the semi-structured interview protocol consisted of eleven open-ended questions (see Appendix D). The content of the protocol questions was guided by the research problem of high dropouts faced among first-year ODeL students in South Africa. The questions focused on the possible causes of high drop-out rates and what can be done to promote sustained learning. Eight students who were registered for MAT1503 in 2018 and or 2019 participated in the interviews. These students fell into categories of those who had passed the module, those who failed and reregistered for the module, and those who had failed and not registered again. The rationale for including students who fell in these categories is explained in Section 3.4.1.1 to 3.4.1.3. The bibliographical details of students are provided in Chapter 4 Section 4.2.1.

A pilot study was conducted on two students selected from the targeted pool of participants. These two students were excluded from the research. Fox and Bayat (2007:102) say that pilot studies are trial runs of research conducted on a small scale to check if the research design and methodology were effective. The questions were clear and the length of time it would take to conduct interviews was recorded. The pilot study is discussed in detail in Chapter 3, Section 3.4.2.

1.9.3 Data analysis

Data were analysed inductively. Thomas (2006:237), mentions that inductive data analysis is an approach used to understand the raw data and derive themes and concepts through interpretations of the data. Therefore, the text data that were attained from the interviews were examined by searching for themes, using the thematic analysis technique. Ibrahim (2012:40) says the thematic analysis is a method used to analyse qualitative data and focuses on identifying themes of meaning within data. I applied the six phases of the thematic analysis technique as in Braun and Clarke (2006:86-93), namely familiarising oneself with data, creating codes, search for themes, review themes, define and name themes and produce a report. The broad description of the data analysis process is discussed in Chapter 3 Section 3.5.

1.10 Ethical measures

According to McMillan and Schumacher (2014:129), research ethics focuses on what is morally acceptable and unacceptable when acquiring data from participants. "Ethical principles should be applied throughout the process. "Research findings are used by other researchers and the accuracy and honesty of the data is a fundamental requirement to ensure trustworthiness and the validity and usefulness of information" (Booyse, Le Roux, Seroto & Wolhuter, 2011:34)

Therefore, in this research, ethical clearance, and permission to conduct the investigation were received from UNISA (See Appendix A). When the authorities at UNISA consented, the students' information was sought to request volunteer participants. These students were contacted through emails or telephonically to discuss interview times. Each participant was given a letter outlining the intended use of data being collected and in

return, signed informed consent was required from each participant. This was done in line with protocols provided by (UNISA 2013:12).

I was honest in respect of the whole research process, including generating and analysing data, publishing findings, and acknowledging the sources. I did not commit plagiarism, piracy, falsification, or the fabrication of the findings at any stage of the research, and the findings of the research are reported accurately. Most importantly I respected the data that participants provided and reported it honestly by not fabricating any information to make the research report favourable.

Besides embracing the principles urged by (UNISA 2013:9-17), I adhered to the characteristics of Ubuntu throughout the research. Sigger, Polak, and Pennink (2010:2) describe Ubuntu as the South African expression for humaneness. Participants were respected throughout the data collection process. Participants' confidentiality was assured, the settings and participants were not identifiable in this research report, and protection from harm to participants was also maintained.

1.11 TRUSTWORTHINESS

Importantly, the trustworthiness of the research had to be addressed. Wiid and Diggines (2015:64), mention that the quality of qualitative research lies in its trustworthiness. Bloomberg and Volpe (2012:125), explain that trustworthiness supports that the findings of qualitative studies are genuine. Wiid and Diggines (2015:64) state that trustworthiness is based on four fundamentals namely: credibility, dependability, transferability, and confirmability which are used to demonstrate the truthfulness of the research report. The trustworthiness of this research is discussed in Chapter 3 Section 3.6.

1.12 CLARIFICATION OF CONCEPTS

Five key terms underpin this research study. In this study, unless the context indicates otherwise, the meanings of these keywords are indicated as follows:

Drop-out: According to Oxford Advanced Learner's Dictionary International Student's Dictionary (2015:460) a drop-out refers to someone who leaves school or college before

completing their studies. Furthermore, Larsen, Sommersel, and Larsen (2013:5) explain that a university drop-out generally refers to situations where a student leaves his or her enrolled studies before achieving a formal degree. In this study, the dropouts are fundamental persons because their interpretations of the challenges they faced during their first-level modules of ODeL informed me of the possible causes leading to chronic dropouts in South African ODeL.

Open Distance and e-Learning (ODeL): ODeL is a recent concept that is practiced in traditional ODL or DE by integrating the use of computers and the internet to facilitate learning and communication with distance learners. Darinskaia and Molodtsova (2019:115-117) state that ODeL refers to teaching and learning that is done in a digital format offering students flexibility and control in terms of time, place, and pace of studying. ODeL is the context of this study. I intended to discover strategies that can support sustained learning in ODeL.

Strategies for teaching and learning: A strategy as explained in Oxford Advanced Learner's Dictionary International Student's Dictionary (2015:1495) is a plan intended to attain a specific goal. Hill, Jones, and Galvin (2004:5) define strategy as an action taken by an organisation to achieve a goal or goals. Strategies for teaching and learning to support sustained learning in ODeL are what this research intended to unveil. Information leading to the formulation of such strategies can assist the stakeholders on the way forward.

Sustained learning: Oxford Advanced Learner's Dictionary International Student's Dictionary (2015:1527) explains that sustain refers to make something ongoing without interruption for a period. Chemosit, Rugutt, and Rugutt (2017:2) define, sustained learning as an ongoing intended learning dedication that needs backing, inspiration, and endurance. This research sought to explore ways to incorporate in South African ODeL to achieve sustained learning among its students until the completion of their qualifications.

Student support: Arko-Achemfuor (2017:659) states that student support refers to a variety of services applied by institutions aiming to help students successfully learn and gain skills to complete their studies. Student support in ODeL context is a significant term

of this research because it aims to discover strategies to support sustained learning among students.

1.13 DIVISION OF CHAPTERS

This research report has five chapters as advised in Bloomberg and Volpe (2012:59). The structure is:

Chapter 1

This chapter discusses the background and establishes the research problem that needed investigation. It highlights the background of the research, provides the problem statement and the research questions. It also explains the literature review and theoretical framework, the research design and research methods, and the key concepts associated with the research. Finally, this chapter gives an outline of the entire research by providing an overview of what each chapter comprises. The introduction and background reveal the challenges that South African ODeL is experiencing that pertain to high dropouts of students. This discussion progressed to the formulation of the aims of investigation and the methodology employed to find answers to the research questions.

Chapter 2

In this chapter, the literature review, theoretical framework, and the policies that guide ODeL operations in South Africa were discussed. The purpose of this chapter was to focus on various issues related to challenges faced by ODeL students in South Africa and explore principles that can reduce high dropout rates and promote students' throughput and retention. The literature review was implemented to analyse articles of previous research that are related to this research topic and research problem. The research projects in these articles were conducted within and outside of South Africa. The international and national policies concerning ODeL operations in South Africa were also explored to understand permitted actions and operations. However, special devotion was granted to the analysis of previous studies related to the research problem. This provided a sound foundation, knowing what has been discovered and how it was discovered. I then formulated proper lenses to conduct the investigation which led to embracing the Symbolic interactionism theory, Ubuntu, and Postcolonial indigenous ethical theory as the theoretical framework for guiding the investigation.

Chapter 3

The chapter provides an in-depth discussion of how the empirical study was conducted. The rationale for the methodology of this research was discussed. The methodology comprised of the research design, which included the research paradigm, research approach, and the research type. I explained that the social constructivism paradigm, qualitative research approach, and the case study type that was used in the study before describing the research methods that were used in the study. I then explained the purposive sampling as this sampling method was used for selecting participants. This was followed by discussing how data were collected from eight student-participant through semi-structured interviews using eleven open-ended questions employing face-to-face, online, and telephonic interviews. This was followed by clarifying the steps taken for data analysis, trustworthiness, and finally addressing the ethical consideration.

Chapter 4

Chapter 4 presents the analysis and interpretation of the data findings of this research. The focus of this research was to explore the challenges that students encountered while studying the first-year module in ODeL and seek their viewpoints for strategies to support sustained learning and reducing high dropouts in South African ODeL. It was important to identify such methods for improving student throughput. Of the data that was collected, most of the students indicated that the current service delivery practiced at UNISA, the South African ODeL, that was used as a case for this research posed many challenges that hindered student success. The main and sub-themes that materialised from the collected data were discussed and these themes were considered because they related to the questions that were asked during the interviews.

Chapter 5

This chapter is a summary of the entire research, which includes the introduction, literature review and theoretical framework, research methodology, research findings, and data analysis, conclusions linking them to the research questions, limitations, recommendations, and suggestions for further research. It reflects on the study and its achievement of the listed aims and objectives. To conclude this research study, necessary recommendations were submitted to UNISA and other ODeL institutions for supporting sustained learning and student retention. I provide the relevant recommendations as

strategies to support sustained learning in the South African ODeL environments as discovered during the investigation. I concluded the chapter by providing suggestions for best practices and further research while acknowledging the limitations of the study.

1.14 CONCLUSION

This chapter presented the foundation of this research and introduced the research report which clearly explained what is expected in each chapter. Firstly, I discussed the background of the research and problem formulation. Secondly, I developed research questions that this research required to answer and the aims that I wanted to achieve from conducting the research. Thirdly it was an introduction to the theoretical framework and literature review. Fourthly, it was a discussion of the research design that included the methodology, ethical measures, and trustworthiness that was adapted to. Lastly, I provided clarification of the keywords of this research and provided an outline of all chapters of the research report. The next chapter discusses the literature review of previous research that is related to the research problem of this investigation, the theoretical framework that underpinned this research, and the international and national policies of Open Distance and e-Learning.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter introduced the study by explaining the logic of this research and how it was conducted. This chapter discusses the role of ODeL in the South African context and the conceptual framework for this research, which constitutes the principal focus of this investigation. The discussion was followed by the presentation of policies and frameworks that guide South African open distance and e-Learning locally and globally. The knowledge of local and global policies and frameworks concerning ODeL provision assisted me to understand suitable recommendations at the culmination of this investigation. I then provided an overview of six peer-reviewed research articles that are related to the research problem of challenges faced in ODeL leading to high dropouts. Finally, it was the description of the theoretical framework that underpinned this research.

2.2 THE ROLE OF ODeL IN SOUTH AFRICA

ODeL is the modern model of education delivery in DE that integrates e-Learning in ODL. Southern African Development Community (SADC 2012:4) says that ODL is a method of learning that focuses on relieving students from all restrictions of time, space, and place and providing them flexible opportunities to learn. And (DHET 2012:5) explains that e-Learning is learning that is done through digital resources. Makhanya (2016:4) describes e in ODeL as the increased use of ICT's for courses. Makina (2018:2), mentioned that the

introduction of the ODeL model in DE was executed to bridge the geographical gap and the time to improve the interaction between the institution and its students. Makina (2018:2) states that at UNISA the notion of ODeL was introduced multi-dimensionally to influence the achievement of its vision and mission. As confirmed in (UNISA 2019), UNISA's vision is to become the African university that provides services to humanity to shape futures, and its mission is to be a comprehensive ODL institution that also delivers excellent tuition and promotes active community commitment.

For some time, DE has been changing its traditional practices by including technology in the teaching and learning process to adapt to societal changes. These modern practices have transformed the concept of DE. As mentioned in (DHET 2012:20), it is now impossible for distance education to maintain the traditional model that associates DE with only print-based correspondence teaching and learning.

Incorporating technology in modern-day ODL creates numerous benefits, it promotes online learning and e-Learning; improves the interaction between the institutions, instructors, and students, and most importantly enables the institutions to offer learning support to students. Mou and Rajib (2019:99) express that e-Learning is recognised for eliminating numerous barriers in more than fifty countries with thousands of institutions using e-Learning to deliver educations. Additionally, UNESCO (2002:3) relates that technological advances have made it possible to teach more and more subjects at a distance which has led to an explosion of interest in distance learning.

According to (DHET 2014:3) in the government notice No. 535, the Minister of Higher Education and Training published a policy for the provision of distance education at South African universities in the context of an integrated post-school system. The (CHE 2014:1) also published a good practice guide for distance education in a digital era. These two publications revealed that the integration of technology in higher education was bridging the gap between students and instructors.

DE makes a major contribution to higher education. Rossi and Sirna, (2008:7) acknowledge that DE produces thousands of graduates every year which has a profitable influence on their living and the economy. Within South African higher education, DE has been performing an important role by providing access to many diverse students for over

a decade. As revealed by (DHET 2012:9) in 2009, distance education enrolments were 37% of all higher education enrolments. The (DHET 2014:10) states that ODL is becoming a solution to many university hopefuls since available conventional universities are unable to meet the huge demand for higher education. With the fast-changing technological society, DE can expand its services by providing access to higher education to a greater number of students. In that way, it can provide access to higher education to many and provide advanced skills needed to effectively function in modern economies. Through developing these skills, the graduates from ODeL will be prepared for an active world of work. As illustrated in (DHET 2014:3), distance learning can render an important contribution to economic growth by providing access to higher education which the current residential universities are failing to meet the demand.

However, as stated in Section 1.1, the graduation rate in distance university provision has been unsatisfactory. This signifies that many students in DE find it challenging to complete their desired qualifications, particularly the difficult qualifications, and as a result, they end up choosing easier qualifications that they will be able to complete. This notion is apparent in (DHET 2018:108) where UNISA statistics show that in 2016 only 34 363 students enrolled for science, engineering, and technology out of 299 324 overall enrolments. Furthermore, as reported in (DHET 2019:85) in 2017 at UNISA, 38 837 students enrolled for science, engineering, and technology out of 344 015 overall enrolments. The minister of higher education (DHET 2014:11) indicated his concern that this tendency does not develop the expected graduate competencies and does not address national needs. Although this research was conducted to discover strategies to promote sustained distance learning in general, the improvement in learning experiences and students' throughput in DE can eventually build confidence and trust amongst students, that they will attempt enrolling in complex courses like Science, Technology, Engineering, and Mathematics (STEM). Perraton and Huelsmann (1998:20) assert that DE seems ineffective because most courses have high drop-out rates. This causes dissatisfaction in students and costs per graduate are much higher than the cost per student. Therefore, these statistics signals for proper intervention to promote sustained learning in DE.

To ensure the need for intervention with regards to this problem, I also searched for similar information from various sources such as news, newspapers, published statistics, and previous investigations and discovered that intervention was necessary. Thus, proper

intervention can be done after conducting research and identifying the causes that are leading to high dropouts. This will lead to the formulation of strategies that are directed to promote sustained learning. The next section discusses research on strategies to promote sustained learning.

2.3 STRATEGIES TO PROMOTE SUSTAINED LEARNING IN SOUTH AFRICAN ODEL

Katsiolaudes (2006:6) mentions that strategic management and strategic planning provide organisational guidelines to operate efficiently and effectively in their context. Katsiolaudes (2006:6) further states that strategic planning examines strategies that will enable the organisation to prosper. Strictly speaking, it is a continuation of assessing, planning, analysing, and monitoring, activities occurring in an organisation, to ensure that its goals and objectives are met. Jenkins and Williamson (2015:1) explain that strategic management in an institution seeks to shape the purpose of an institution. It places an organisation into the best business position and strives to uphold and improve that position by employing and acquiring suitable resources and observing and responding to environmental changes as well as checking and reacting to the demands of the stakeholders. Furthermore, Jenkins and Williamson (2015:1) advise that for organisational strategists to achieve the preferred accomplishment they should answer questions such as: where the organisation is now, what options are open to the organisation, what is the best way forward for the organisation, how is this to be achieved?

Based on the information in Section 1.1 of this study, where Govender (2016) claims that, in 2005, half of the students who registered for distance education dropped off after one year of studying and (DHET 2019:90) and, (DHET 2020:103) affirms that the graduation rate for the distance education mode for undergraduates for 2017 and 2018 was fifteen percent. These statements exhibit that South African DE had been facing challenges in producing satisfactory throughput for over a decade. It is important that factors hindering success among students must be investigated to discover strategies that can support sustained Learning in open distance and e-Learning basing on the South African context. These strategies were to be formulated as advised by students who participated in this investigation since the students are the people who are affected by the phenomenon. If carefully formulated to meet the needs of an average student as advised by students, high

drop-out rates experienced in ODeL can be reduced. The motivation behind this investigation is the role that ODeL performs within South African higher education in providing access to those who cannot be accommodated in the few conventional universities available. The author in UNESCO (2002:3) explains that the technological advances in DE have led to increased interest in distance e-Learning. Therefore, its effectiveness can assist in producing more human capital for the labour force. The (DHET 2014:6) emphasises that only providing access, does not mean anything unless chances of success are provided. The minister of higher education (DHET, 2014:6) further asserts that improvements in students' retention, pass rates, and throughput in DE remain important.

However, DE operations are guided by various organisations. This is performed to ensure uniformity among all distance education institutions. In the subsequent section, I provide an overview of local and international organisations and frameworks that guide ODeL in South Africa.

2.4 LOCAL AND GLOBAL FRAMEWORKS ON OPEN DISTANCE AND ELEARNING OPERATIONS

As with all educational organisations, the operations of distance education institutions in South Africa are guided by various frameworks and policies from the Department of Education and various other institutions that guide DE locally and internationally. These organisations provide frameworks, guidelines, or standards for operating DE institutions. The (DHET 2012:6) describes standards as reports of preferred learning outcomes and their related evaluation standards. Additionally, Parkay, Anctil, and Hass (2014:302) state that standards are developed to ensure that all students reach the same goals. Regarding this investigation of strategies to sustained learning in South African ODeL, I analysed the frameworks provided by SADC as international policies. I also analysed the frameworks stipulated by local organisations namely: the Council on Higher Education (CHE), the Department of Higher Education (DHET), the National Association of Distance Education and Open Learning in South Africa (NADEOSA), and the South African Qualifications Authority (SAQA). I examined the provided frameworks to understand the international and local acceptable DE operations. In the paragraphs below I discuss the frameworks provided by each organisation starting with SADC.

According to the (SADC 2012:6), SADC has 15 Member States from Southern Africa of which South Africa is one among them. It was formed in July 1992 when a Treaty was signed by the Heads of States in Namibia. The vision of SADC as reported in (SADC 2012:6) is to enhance economic growth, ease poverty, improve people's quality of life in the region, and to acknowledge that the key to attaining its vision is education. The SADC ODL policy framework is based on nine principles that guide all its members on the provision of ODL. The nine principles as provided by (SADC 2012: 23-24) are:

- 1) Openness: the decrease of constraints to accessing.
- 2) Flexibility: must be flexible in providing ODL programmes and ascertain that ODL arrangements are dynamic and react to the demands and needs of the learners which are changing most of the time.
- 3) Learner-centeredness: that the learner must be at the centre of all the activities with a favourable environment for learning and the basic resources must be at the learner's disposal.
- 4) Quality and relevance: ensure that quality and relevant ODL programmes are developed and delivered.
- 5) Cost-effectiveness: cost-effectiveness must be indorsed in the development and delivery of ODL programmes.
- 6) Collaboration and partnership: to enhance collaboration and partnership on developing materials, supporting learners, quality assurance schemes, credit transfer, and portability of qualifications, research, and exchange programmes.
- 7) Efficiency: to maintain the code that the goals are reached in the maximum effective method to increase profits.
- 8) Equity: must be directed by the rule of equity and the important values of sustainable development and inclusivity that seek to involve all social groups even those with disabilities in providing ODL programmes.
- 9) Harmonisation and standardisation: indorse domestication of regional instruments to guarantee harmonised and consistent methods developing and delivering ODL programmes.

In these nine principles provided by SADC, one can notice that in the provision of distance education SADC aims to provide higher education access to almost everyone willing to

study. Principles like openness, collaboration and partnership, flexibility, efficiency, cost-effectiveness, quality and relevance, flexibility, and learner centredness placed the learners' interest at the heart of the education delivery. Harmonisation and standardisation seek to promote consistency and standardisation in developing and delivering ODL programmes within the SADC region. In a nutshell, the SADC principles, seek to provide the best opportunities for students, for accessing higher education through distance education while promoting uniformity of distance education delivery within all countries of SADC. After the SADC principles analysis, I went on to examine frameworks provided by local organisations that guide ODL provision in South Africa and they are discussed in the subsequent paragraphs.

Welch and Reed (2010:8) describe the framework for quality distance education which is provided by the National Association of Distance Education and Open Learning in South Africa (NADEOSA). As clarified in (NADEOSA 2017), NADEOSA is a civil society organisation for organisations and individuals who want to be part of ODL. Further, (NADEOSA 2017) mentions that it focuses on the promotion and support of the quality of ODL in South Africa. Welch and Reed (2010:8), states that NADEOSA's framework for quality distance education with thirteen standards constitutes the major institutional components for distance education provision. The standards are policy and planning; learners; programme development; course design; course materials; assessment; learner support; human resource strategy; management and administration; collaboration; quality assurance; marketing and results. It is noticeable from these standards that quality education provision is emphasised, from planning to look at the type of learners to quality assurance and examining the results that ensure that the learners' interest is at the heart of these standards.

As reported in the South African gazette (DHET 2014:3) published a Higher Education Act with the policy that guides the provision of distance education in South African universities within the context of an integrated post-school system. According to (DHET 2014:6-7), the fundamentals of this policy were to provide a broader clarity for distance provision, support a sound growth in distance education besides UNISA, and establish that distance education provides access to higher education as well as ensure chances for success funding, evaluate the provision of distance education and control who is allowed to provide accredited distance programmes, enhance the development and use of Open Educational

Resources (OERs), establish the permission of proper integration of ICT for enabling distance education to be provided in public and private universities and other post-school institutions. The (DHET 2014:3) expresses that it will guarantee that all post-schooling students have access to connectivity. The policy for the provision of distance education in South African universities in the context of an integrated post-school system as stated by (DHET (2014:8), seeks to resolve uncertainties around distance education and support the development of distance education in South Africa as part of the higher education system. Most importantly (DHET 2014:8), highlights, that the policy controlling South African universities should be read together with other policy documents. Appreciating the frameworks provided by the guiding organisations, the quality of courses provided by ODeL organisations remains an important aspect of the service delivery.

The quality of courses developed by ODeL institutions must go through quality assurance processes. A quality assurance policy is one of the policies emphasised in the frameworks provided by organisations that guide the operations of DE in South Africa. As stated in (DHET 2014:14), the quality assurance policy requires the Higher Education Quality Committee (HEQC) of the CHE and Quality Council for Trades and Occupations (QCTO), to ensure that they become fully equipped to evaluate new distance programmes. This is essential assuming the importance of applications for distance education. As reported in (DHET 2007:7), the higher education act no. 101 of 1997, mentions that the CHE is the quality council for higher education that is responsible for generating and setting standards of higher education qualifications while ensuring that the qualifications meet the criteria for SAQA's registration. According to SAQA (2010), in its skills development act 97 of 1998, acknowledges that QCTO manages the occupational qualifications sub-framework by setting standards for developing quality assurance for qualifications. It is accountable for quality assurance and promotion through the Higher Education Quality Committee (HEQC). Further, (DHET 2014:14) describes the importance of the Higher Education Qualifications Framework (HEQF) for quality checking because they stipulate yardsticks for development, implementation, and quality assurance of programmes leading to qualifications. As stated in (CHE 2013:5), Higher Education Qualifications Sub-Framework (HEQSF) delegates the CHE for developing standards for all higher education qualifications in general, including DE. Standards are vital for the operation of the Higher Education Qualifications Framework (HEQF) because they stipulate yardsticks for the development, implementation, and quality assurance of programmes leading to

qualifications. In 2014 the CHE released frameworks for distance education in a digital era. The (CHE 2014:3) provides the criteria for curriculum design, development, and delivery for distance education in a digital era. The stages in the criteria are first, curriculum design, and development. Secondly, course design and development, thirdly assessment and activity design, and finally the resourcing of the curriculum. These frameworks provided in the (CHE 2014:3) for the provision of distance education, highlight a meaningful flow from the development to the resourcing of the curriculum which results in quality education delivery. The (CHE 2014:3) framework emphasises starting with considering the type of learners to be educated when designing and developing the curriculum and courses on how the learners are going to be educated and assessed and subsequently distribute the curriculum. In the next paragraph, I discuss the assessment policy of Higher Education (HE). This assessment policy is also comprehensive to the assessment of ODeL.

The South African Qualifications Authority (SAQA) provides the national assessment policy for all education matters concerning South African education including DE. According to (SAQA 2015:14-15), the national assessment policy states that three types of assessments must be used for all educational evaluations; therefore, these assessment types apply to the DE context. The first one as provided in (SAQA 2015:14-15) is a formative assessment that is done during the pedagogical process to develop learners' abilities. Formal and informal assessment activities are conducted under this form of assessment. Further, (SAQA 2015:14-15) also explains that another type of assessment is a summative assessment which is done to make a judgment about achievement. It is completed at the end of the learning programme. The third type of assessment as provided by (SAQA 2015:14-15) is an integrated assessment of applied competence that allows students to demonstrate applied competence which uses a variety of formative and summative assessment methods. Also, (SAQA 2015:15) mentions that integrated assessment combines, interprets, and communicates knowledge from multiple scientific disciplines. Evidence is collected in its natural occurrence, for example, obtaining evidence from other sources such as supervisors' reports, testimonials, portfolios of work previously done, logbooks, and journals. Following (SAQA 2005:20) deciding on a type of assessment should be guided by factors such as, knowing why we are assessing, the rationale for the assessment, and what it is that we are assessing. That guides the assessor to perform a fair and appropriate assessment.

Generally, the main goal of frameworks provided by international and local organisations to guide DE operations is to achieve quality service delivery in terms of teaching and learning processes, students' support, good results, and fair assessments. These policies discussed in this section are not the only policies, but they are the most applicable to this research of strategies for sustainable learning in South African ODeL. The strategies that this research recommends should correspond with the established policies that guide South African ODeL.

The review of the policies in this section guided me to recognise the regulations and frameworks of DE, ODL, and ODeL in South Africa. Such understanding assisted me in the aspect of the recommendations for strategies to support sustained learning (see Section 5.6). In the following section, I discussed the literature review of previous investigations related to the research problem. The literature review was the starting point of this investigation to get enlightenment of the research problem and to examine what had been investigated and discovered.

2.5 LITERATURE RELATED TO THE RESEARCH PROBLEM

In Section 2.2 I elucidated that in South Africa ODeL is becoming a solution to many university hopefuls to meet the great demand for higher education. However, those who register are facing challenges in succeeding in their studies, therefore many students quit before completing their qualifications. As reported by (DHET 2018:113), the overall graduation rate for the undergraduates of South African distance mode was fifteen percent. This is concerning and therefore requires intervention to discover the causes leading to these adverse situations and build strategies for sustained learning among those who commence qualifications. Hence, this study was conducted to discover such strategies from the perspectives of undergraduate students studying the first-year module. In this study the investigation was performed on one module at one institution, therefore the findings will not be generalisable, but they may provide enlightenment of strategies that can improve students' throughput.

To understand the research topic, I analysed literature that features information relevant to the research problem. A literature review can be defined as an evaluation of information

on existing literature related to the topic. Bloomberg and Volpe (2012:75) mention that it is done for the following reasons: to prevent unnecessary duplication of research, to refine one's research topic, to acquire a better understanding of one's topic, to understand the usefulness of a research method, to find out if there is any other study ever done about the same topic, to reveal the findings of previous studies related to the problem. McMillan and Schumacher (2014:85) discuss that doing a literature review is important for two reasons which are, creating connections between current knowledge on what is being investigated and providing useful information about the methodology that can be used in the new study. Booyse, et al (2011:23) maintain that two crucial skills are required when conducting a literature review which are to know where to retrieve the data and be able to analytically evaluate and explain what has been reviewed.

The literature review was done at the beginning of the research process employing a narrative literature review technique to examine the literature. Onwuegbuzie and Frels (2016:24), point out that a narrative literature review summarises and criticises the body of literature and draws a conclusion. Onwuegbuzie and Frels (2016:24) further discuss the four types of narrative reviews namely: a general literature review, theoretical literature review, the methodological literature review, and the historical literature review. I utilised the methodological literature review. Onwuegbuzie and Frels (2016:24) state that a methodological literature review analyses the research design and methods that were used in the investigation.

Employing the methodological literature review, I first looked for articles of investigations for strategies to sustained learning in DE, ODL, or ODeL. The platforms that I utilised for searching the articles related to the research topic, are Google scholar, Ebsco Host, Academia, science direct, and Researchgate. I also searched for books, journals, newspapers, or magazines at UNISA and government libraries in Johannesburg. However, I could not find such literature. I then searched for articles on challenges faced in DE, ODL, or ODeL leading to high dropouts and discovered six related articles. Of these six articles, three were for local review and three for comparative international review. In these six articles, three investigations were conducted in South Africa, one in Zimbabwe, one in Ghana, and one in the Philippines. In the research articles, I examined the research methodologies and research designs. In doing so, I identified that none of the investigations had considered exploring challenges faced by students in the foundation

years. That identified gap allowed me to plan this current investigation considering the opinions of the students in foundation years in ODeL while contemplating what has been already revealed. Respectively, I decided to first identify challenges faced by the participants of this research (students in the foundation years of ODeL enrolled for a first-year module) and then seek their viewpoints regarding what can be done to reduce the challenges and achieve sustained learning. These viewpoints would then be suggested as strategies that can promote sustained learning in South African ODeL. The research methodologies, strengths and weaknesses, and findings of the previous investigations are critically discussed and examined in a chronological order commencing with the earliest article written in 2012 in the following section. The methodology for this research is discussed in Chapter 3.

In 2012, South African researchers Liebenberg, Chetty, and Prinsloo investigated challenges faced by distance learners at UNISA. Their research was based on students' access and skills on technology usage in the ODL context. Liebenberg et al (2012:253), explained that the study used two groups of students, those who used myUnisa or used mobile applications to access and use the technology provided by UNISA and those who were not using myUnisa and technology to communicate with the university. Liebenberg et al (2012:253) affirm that this investigation was to get students' perspectives by employing a two-fold methodology: an online survey for students with a myUnisa account and accessed the technology provided by UNISA and a paper-based survey for those students who did not have a myUnisa account or with an unused myunisa account.

Liebenberg et al (2012:250) reported that in the research they identified that challenges facing ODeL in South Africa are access to ICT and the ability to use it. Additionally, Liebenberg et al (2012:263) revealed that students who were not active on myUnisa and did not complete the paper-based survey have less access to ICTs for educational purposes. The study discovered that not all students were ICT proficient in the UNISA environment and this could have been posing challenges for learning because it is assumed that students are ICT literate with some levels of ICT proficiency. Liebenberg et al (2012:250) concluded that student access to technology and functional competence is critical taking into consideration that it prepares graduates for an increasingly digital and networked world.

The investigation above might have given the stakeholders at UNISA information about the students' learning needs. As stated by UNISA (2019), all UNISA centres are providing Internet access to registered students. There are also telecommunication facilities across the country where students who are unable to visit UNISA campuses can get access to the Internet. This is to ensure that students who do not have access to the Internet can utilise myUnisa. Technology and computer usage courses are also provided to students every semester where students can learn computer and technological skills. Concerning this current research of high drop-out rates in the South African ODeL context, access to the Internet and the ability to use ICT might have had a little impact on solving the challenges being faced by DE students. This is because the enrolment: graduation ratio at UNISA is still low and unsatisfactory. The figures published by (DHET 2019:90) for the 2017 academic year showed that the graduation rate for undergraduate certificates and diplomas was 16.3% and for undergraduate degrees was only 9.6%. This graduation rate is almost the same for 2018 academic as provided in Section 1.4 therefore, the dropouts at UNISA, which is the prominent distance learning institution in South Africa is still a concerning issue.

The issue of high dropouts in South Africa was also examined at UNISA in 2013. De Hart and Venter (2013:1) analysed the issue by comparing the drop-out rates in urban and rural areas. The study was conducted using records in the UNISA student database which they used to obtain students' demographic information, including the magisterial district where the students lived. The findings as revealed by De Hart and Venter (2013:69) established that the effect of urbanisation only accounted for a 1% higher drop-out rate for rural students over urban students. However, De Hart and Venter (2013:69-70) further explained that with urbanisation as a variable, combined with other demographic variables, the findings were sometimes unanticipated. They mentioned that the ten multivariable comparisons consistently proved that rural students dropped out the most but in four of these multi-variable comparisons it indicated that rural students also dropped out the least. De Hart and Venter (2013:74) recommend that further study can be conducted to analyse the characteristics of population groups and language groups in rural communities to uncover why particular students drop out more than others. They also recommend that certain interventions for supporting students that are prone to drop-out should be implemented.

The comparison of drop-out rates between rural and urban students was a worthy study because these students are prone to inequalities. This research believes that there could be other factors that are contributing to the high drop-out rate at UNISA other than geographical differences amongst students. Although this study is enlightening that certain environmental inequalities can contribute to higher dropouts, De Hart and Venter based their investigation on the university records. Thus, this investigation was seeking to get the perspectives of the students who are affected by the phenomenon to identify the causes of high dropouts as indicated by the students.

In an attempt to overcome difficulties faced in distance e-Learning, another researcher from UNISA, namely Nyoni (2014:77) investigated difficulties faced at UNISA regarding e-Learning. Employing the deconstructive and internal criticism Nyoni (2014:83) gathered the perceptions of fifteen facilitators regarding their e-readiness on using ICTs affordances in ODL. Nyoni (2014:88), discusses that the findings revealed that most of the facilitators lack the e-readiness skills crucial to effectively manipulate the ICT tools in ODL environments. The lack of e-readiness skills among ODeL instructors can be a hindering factor for students' success since learning support is limited. Electronic teaching skills can be utilised as methods for promoting sustained learning in South African ODeL by exploiting ICTs in the learning process. Nyoni (2014:88), further explained that some facilitators did not fully understand what sustains ODL teaching and practices. Also, the e-training for the instructors was periodically and insufficient. Nyoni (2014:89) recommends orientation packages for inexperienced instructors that cover e-readiness, e-training, and ODL principles and practices, to adequately prepare them for the ODeL pedagogies and methodologies.

It is crucial to presume from this research that facilitators' attitudes and capabilities can contribute to factors that cause students' dropouts. In this digital era, the gap between instructors and students in distance education is bridged, thus, facilitators can develop strategies to support persistence in learning. Abdullah and Mtsweni, (2014:67) advise that distance education institutions can take opportunities for the increased reliance on technology and embrace it for technology-enhanced learning and innovative assessment to support student learning processes. If the facilitators lack e-learning skills or if they are not ready to utilise e-learning facilities to bridge the gap towards supporting students

learning, students' support from the ODeL institutions will remain minimal hence resulting in students prone to drop out.

To conduct an international comparative review to examine the causes of high dropouts in ODeL, I also analysed investigations that were conducted in other countries which are: a 2014 article by Ohene and Essuman in Ghana, a 2015 article written by Musingafi, Mapuranga, Chiwanza, Zebron in Zimbabwe, and a 2016 article written by Arinto in the Philippines. The details of the research in these articles are discussed below.

In 2014 researchers in Ghana, namely Ohene and Essuman investigated challenges faced in distance education institutions. These researchers undertook this study to explore and provide updated information on the challenges faced by DE students at a university level. Ohene and Essuman (2014:1) state that interviews and questionnaires were used for data collection. According to Ohene and Essuman (2014:161), three hundred participants were selected from three institutions were initiated. Ohene and Essuman (2014:162-169) explain that some of the challenges identified were institutional, instructional, social, psychological, and financial.

This was a high-quality study, conducted at more than one institution. It helped us to get the perspectives of students from different learning organisations and discover diverse problems faced by students.

In 2015, Musingafi, et al performed their research to investigate the challenges facing open distance learning students at the Zimbabwe Open University (ZOU). In this investigation Musingafi et al (2015:61) state that data were collected from students through questionnaires and interviews, which were supplemented by a documentary review. The research recognised that insufficient time to study, problems in accessing and using ICT, poor feedback, and inadequate study materials were the most reported challenges faced by ODL students in Zimbabwe. Based on their investigation Musingafi et al (2015:65) recommended that the ZOU should strive to achieve effective and balanced teaching and learning systems to satisfy the desire of the learners and ensure that they continue with their studies. They advised that this can be achieved by equipping students with independent study skills; train students with ICT skills; recruiting competent, self-motivated, and committed staff; improving administrative and counselling services at

the regional centres so students with different problems can access such services easily; and ensure production and delivery of study materials.

The study conducted by Musingafi et al provides constructive recommendations that can be beneficial to any ODeL institution. However, some findings of that study such as problems in accessing and using ICT and inadequate study materials which were the most reported challenges faced by ODL students, do not necessarily apply to the South African context. As an example, (DHET 2014:3) reports that it will provide average access to connectivity to all post-schooling students. At UNISA, from my experience as a UNISA student is aware that students have access to the internet and if study material is not delivered in time it can be accessed electronically on myUnisa within hours after registration. Additionally, according to (UNISA 2019), the institution provides digital access to all its registered students and is in partnership with enterprises with digital facilities in remotes areas to provide access to technologies to the students.

Challenges faced in ODeL were also investigated at the University of the Philippines. Arinto (2016:163), says that the research was conducted to identify issues and challenges concerning ODeL implementation. The study investigated by gathering the perception of ten academics regarding their experience with the phenomenon at the university and to obtain their suggestions for institutional policy and practice. To conduct that research, data was collected through-semi structured interviews where participants were purposively selected based on the way they applied various technologies in their teaching and their collective experience of distance education. Arinto (2016:165) states that the focus of the investigation was to gain the opinions of the academics regarding the several generations of DE at the institution, namely the early phase of pre-packaged print-based materials and face-to-face tutorials, the middle phase with print-based learning resources and online tutorials, and lastly, the current phase of resource-based online course development and delivery.

Arinto (2016:173) explains that the study revealed that the administrators that were interviewed, were willing to consider new practices and directions in ODeL but they were only a few amongst most academics at the university. This research conducted by Arinto sheds light on some of the problems that may cause low throughput rates and high dropouts in distance education. The academics of an institution can also add challenges

faced by students when resisting change, particularly if it involves student support. Instructors' attitudes towards exploring new distance learning pedagogics determine the successes or failures of their students. In the current generation of distance education integrating online teaching strategies, effective learner support can easily be achieved in any DE institution. This point is also mentioned by Nyoni (2014:79) who advises that e-learning readiness assists instructors to design inclusive learning programmes and deliver effective learning experiences to ODL students.

Based on the findings of the literature review, I could not locate anything related to the topic of strategies for sustained learning in the South African ODeL context. It may be because the topic has not been investigated up to this date or because the research done was not published in the books and journals on open distance e-Learning. Available research is partially related to the research topic because it mainly focused on the challenges faced in ODL institutions and provided recommendations. The table below is the summary of the investigations and their findings.

Table 2.1: Summary of the investigations

Investigation And Year conducted	Methodology	Description and purpose	Main findings	Researchers' Comment
Student Access to and Skills in Using Technology in Open and Distance learning Context. Conducted: 2012 (South Africa)	The study collected students' opinions using an online and paper-based survey from two groups of students. One group of students utilised myUnisa or ICTs provided by UNISA. The other group was of students who did not use myUnisa and	Students' access and skills in technology usage in the ODL context.	Identified that challenges facing open distance learning students in South Africa are access to and the ability to use ICTs.	Access to the Internet and the ability to use ICT might have little to solve the challenges being faced by ODeL students because even after the improved access to ICTs, high drop-out rates in South African ODeL is still a concerning issue.

Investigation And Year conducted	Methodology	Description and purpose	Main findings	Researchers' Comment
	technology for communication with the university.			
Comparison of Urban and Rural Drop-out rates of Distance Students. Conducted: 2013 (South Africa)	The study used records in the UNISA student database to gather students' information.	Comparing the drop-out rates in urban and rural areas.	The effect of urbanisation had only a small percentage for a higher drop-out rate for rural students over urban students.	This investigation was based on university records, therefore, this concerned investigation intended to explore the problem by talking to students and obtaining their opinions.
E-readiness of ODL facilitators: Implications for effective mediation. Conducted: 2014 (South Africa)	The investigation collected the views of fifteen facilitators concerning their e-readiness on using ICTs in ODL through the deconstructive and internal criticism analysis.	Investigated challenges faced at UNISA concerning e-learning by collecting opinions of facilitators considering their e-readiness on using ICTs affordances in ODL.	Most facilitators lacked the e-readiness skills to use ICT tools in ODL environments. Some facilitators did not understand what sustains ODL teaching and practices, and the e-training for instructors was occasionally and not enough.	Facilitators' ability to keep pace with current trends in education is of utmost importance. In this scenario, the readiness of the facilitators to employ ICTs could provide adequate learning support to students. Therefore, this concerned research intended to seek students' opinions on challenges hindering success and provide recommendations.

Investigation And Year conducted	Methodology	Description and purpose	Main findings	Researchers' Comment
Challenges Faced by Distance Education students of the University of Education. Conducted: 2014 (Ghana).	Used interviews and questionnaires for data collection from three hundred students from three institutions	To enquire and provide updated information on the challenges faced by DE students at a university level from three institutions.	The challenges discovered were institutional, instructional, social, psychological, and financial.	Informative research that sought to discover students' challenges to provide updated information.
Challenges for Open and Distance Learning students: Experiences from Students of the Zimbabwe Open University. Conducted: 2015 (Zimbabwe)	In this investigation, questionnaires, and interviews were used for collecting data from students. The questionnaires and interviews were also supplemented by a documentary review.	To investigate the challenges facing ODL students	Insufficient time to study, problems in accessing and using ICT, poor feedback, and inadequate study materials were the most reported challenges faced.	Comprehensive research that was able to identify challenges by consulting students. Similarly, this current research also needed to discover challenges faced by students through students' enquiry and ask their opinions regarding strategies that they think can support sustained learning in the South African settings.
Issues and Challenges in open and distance e-Learning: Perspectives from the Philippines.	The study, through semi-structured interviews, examined the views of ten academics regarding issues and challenges	To get the opinions of the academics regarding the several generations of DE at the institution from the pre-packaged print-	Established that only a few academics were willing to explore new practices and directions in ODeL at the university	The investigation sheds light that the academics of an institution can also contribute to challenges faced by students when resisting change, particularly if it

Investigation And Year conducted	Methodology	Description and purpose	Main findings	Researchers' Comment
Conducted: 2016 (Philippines)	concerning ODeL implementation.	based materials to the online course development and delivery		involves student support.

These previous investigations as summarised in Table 2.1 above occurred in a range of different contexts and all investigations indicated that ODL faces many challenges. A problem affecting the previous investigations that I analysed is that the scope of the studies did not precisely consider the perceptions of first-year students or undergraduates studying first-year modules. Studies in this regard might exist, but I could not find any. From these previous studies analysed, the research presented the opinions of students or academics in general. This resulted in me being anxious about discovering what might be affecting the success of first-year students in South African ODeL through expressing their viewpoints. This is because, if the problems are discovered from the foundation years and attended to, better learning experiences may be achieved throughout to senior years. Therefore, I aimed to seek opinions regarding the learning experiences of students studying first-year modules. To obtain the viewpoints of the students, I needed to interact with such students.

In the next section, the theories that underpinned this study will be discussed. These theories are the symbolic interactionism theory, Ubuntu philosophy, and Postcolonial indigenous ethical theory and they form the theoretical framework of the study.

2.6 THEORETICAL FRAMEWORK

According to Onwuegbuzie and Frels (2016:289), a theoretical framework serves as a guideline for the research using formal theories initiated by exercising a customary and logical clarification of events and correlations. It is a structure of combined theories that guide an investigation. The theoretical framework of this research is comprised of three theories which are symbolic interactionism, Ubuntu, and postcolonial indigenous ethical

theories. The common attributes of these theories, value and respect perspectives of others: "Ubuntu is the capacity in African culture to express compassion, reciprocity, dignity, harmony, and humanity in the interests of building and maintaining community" (Nussbaum, 2003:21) while postcolonial indigenous ethical theory "defines research as respectful when it benefits its people" (Chilisa, 2012:174). Additionally, Sarantakos (2013:42-43) states that symbolic interactionism's main concern is social communication because that is how people interpret and make meaning of situations. The next section discusses the attributes of these theories and their relevance to this investigation. This framework aimed to provide students, the opportunities to express their viewpoints concerning what they believe can enhance their successful learning.

2.6.1 Symbolic interactionism

Alver and Caglar (2015:479) say that symbolic interactionism is based on the work of Herbert Mead, a philosopher, and social psychologist. Further, Alver and Caglar (2015:480) discuss that symbolic interactionism examines the community by addressing the opinions that people place on phenomena and behaviours. Based on the assumption that a community should be constructed socially, symbolic interactionism leads to a community that is communally built through human interpretations. According to Carter and Fuller (2015:1), the development of symbolic interactionism was to perceive the operation of the community from the bottom-up,' to concentrate on micro-level processes that surface through face-to-face interaction to understand the affairs of society. Additionally, Carter and Fuller (2015:1) mention that symbolic interactionism emerged through responding to the typical viewpoints on society that controlled sociology at the time. Furthermore, Carter and Fuller (2015:1) state that the dominant, positivist approaches only seemed to analyse society from top-to-bottom concentrating on the impact of macro-level institutions and social structures and how they force on and limit individuals.

The impact of symbolic interactionism on research is that it does not consider pre-given meanings to behaviours or occurrences, they are established through social interactions and correspondingly explained. In this study, the vital role of symbolic interactionism is its explanatory power through social interaction with the targeted participants. This assisted me to critically explore the research problem through the viewpoints of those affected.

2.6.2 Ubuntu

According to Blanche, Durrheim, and Painter (2006:565), Ubuntu is a Zulu term that signifies a commitment to communality values associated with respect, tolerance, and generosity, and working towards common goals. It is an African philosophy that emphasises "being human through other people" and has been succinctly reflected in phrases such as "I am because who we all are" (Mugumbate & Nyanguru, 2013:83). Mbigi and Maree (1995:7) comment that Ubuntu is the feeling of solidarity or brotherhood that arises within people. Similarly, Letseka and Koenane (2016:179) state that Ubuntu is grounded on compassion and safeguarding a content and qualitative human society with the spirit of one family.

The spirit of Ubuntu is common in many parts of the African continent. Rwelamila, Talukhaba, and Ngowi, (1999:338) discuss that Ubuntu is a concept shared by all tribes in Southern, Central, West, and East Africa amongst people of Bantu origin. Consequently, the Ubuntu philosophy is daily practiced by Africans in all facets.

Concerning this current research, the Ubuntu theory was employed to explore and manage the research problem through Africanism. The work of Mugumbate and Nyanguru, (2013:90) states that in African management Ubuntu philosophy is an essential aspect of African culture, that unites them. Mugumbate and Nyanguru (2013:90-91) further explain that the Ubuntu philosophy has been applied in management where service quality is not only determined on what is done for clients but by the spirit of how the services are also rendered. Above all as mentioned in Broodryk (2005:25), an Ubuntu management philosophy combines human relations and human resources theories, therefore guided by Ubuntu in this study, I perceived that taking time to understand challenges faced by students and the students themselves would assist in addressing the problem. From a research perspective, Mugumbate and Nyanguru (2013:97) present the effect of Ubuntu theory on research. They assert that utilising Ubuntu in social work is aimed at generating knowledge. Mugumbate and Nyanguru (2013:97) claim that research always existed in the African setting as well through the notion of *dare*, a Shona custom where ideas are initiated and confirmed by people. The relevance of embracing this African notion in this

current research is to discover students' opinions through their narration of experiences while studying first-year modules in DE.

This current research is underpinned by Ubuntu philosophy. I saw the theory of Ubuntu as the guiding theory, which led to the investigation conducted by exploring the research problem through collecting data qualitatively from a few selected students' participants. These students represented many students. In doing this I embraced an African concept of *dare* that investigates issues based on human perspectives and from a small number of people representing a larger pool of participants.

2.6.3 Postcolonial indigenous ethical theory

Chilisa's postcolonial indigenous ethical theory is a Southern Africa theory that emphasises a decolonising and indigenising research process. According to Chilisa (2011:38), postcolonial indigenous research methodologies recommend changing from traditional procedures of gathering information by cooperating with various knowledge systems. Chilisa (2011:39) further mentions that research methodologies that are indigenised and decolonised attain theories from various sources such as oral traditions stories, legends, language, and artefacts. Chilisa (2012:131) discusses that in this theory, people work cooperatively to identify their problems and formulate solutions. It is community-based and supports links between research and social justice. Chilisa (2012:131) also explains that postcolonial indigenous ethical theory values respect, connectivity, and reciprocity. These values of this theory are important concerning this research as they guided me to value and respect the participants and to indigenise the research process so that it benefits its community. Table 2.2 below is the summary of the theoretical framework stating the main principles of each theory and its relevance to this research.

Table 2.2: The Theoretical Framework

Theory	Principles	Relevance to the research
post-colonial indigenous research	decolonising and indigenising the research process.	Supports social justice and permits research to be conducted in the indigenous method.

Theory	Principles	Relevance to the research
	Supports links between research and social justice.	Allowed me and participants to work cooperatively to identify challenges faced by students and formulate solutions.
symbolic interactionism	Examines emerging connotations through the reciprocal social interaction with individuals. Examines the community by addressing the opinions that people put on phenomena and behaviours	It allowed me to understand the research problem through social communication with the participants.
Ubuntu	It believes a person becomes a person by being moulded by other people. Encourages sodality among communities Cares about societal problems to safeguard happiness among all	It allows me to care for my society and participate in solving problems

Collectively these theories guided the research on answering the main research question: ***What are the strategies for supporting sustained learning in Open Distance and e-Learning in a South African context?*** Symbolic interactionism theory allowed students to explain their learning experiences and recommend strategies based on their experiences. The postcolonial indigenous ethical theory sought to benefit the students and enhance social justice and Ubuntu philosophy which holds the notion that one can only be human when everyone is human therefore by seeking viewpoints from students the study attempted to improve ODeL students learning experiences and throughput to fulfill the African spirit of Ubuntu. Guided by these theories, I employed a qualitative research approach to conduct this investigation which is discussed in Chapter 3.

2.7 CONCLUSION

For ODeL institutions to operate successfully and effectively, they must discover key factors leading to high dropouts among their students. This will lead to the development of a cautiously formulated framework that enables them to bring about sustained learning from the first year to senior students. Developing such strategies to support sustained learning is an important first step toward students' retention. This chapter began by discussing the role of ODeL in South African higher education. This was followed by a discussion of the research interest on strategies to promote sustained learning in South African ODeL. A brief overview of policies that guide the operation of ODeL locally and internationally was then presented. This was followed by a discussion of the literature review of previous research articles that are related to the research topic. The findings of the literature review showed a lack of extant literature on the specific topic of strategies to support sustained learning in ODeL. The national and international available research was based on investigating challenges in ODL or DE. Also, these published studies in the available literature did not specifically seek to investigate the challenges of students studying first-year modules or undergraduates. The previous investigations regarding challenges faced in DE cannot be considered as robust and although they guided me on the topic, they did not address the specific area of concern. Additionally, to date, I could not find research related to the topic of strategies to support sustained learning in South African ODeL. Following the literature review, I went on to explain the theoretical framework that was embraced to guide the research. The theoretical framework consisted of three theories namely symbolic interactionism, post-colonial indigenous research theory, and Ubuntu philosophy. The next chapter is a discussion of the methodology that was used in this study.

CHAPTER 3

RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

The previous chapter discussed the role of ODeL in South Africa and the local and international policies that guide its operations. The research interest in the research topic was also justified in the previous chapter. After the justification of the research interest on the research topic, the literature review of the challenges faced in ODeLs in South Africa and internationally was then discussed, leading to the presentation of the theoretical framework that supported this research. In this chapter, the methodology of this research is presented. According to Kumar (2008:5) research methodology refers to the procedure taken systematically to find answers to research problems. Kumar (2008:5) further mentions that in the research methodology various steps are usually adopted to study the research problem. In that way, the research methodology for this study incorporated the research design, research methods, data analysis, trustworthiness, and ethical measures that are described in the sections in this chapter. The discussion commences with the rationale for empirical research which is explained in the following section.

3.2 RATIONALE FOR EMPIRICAL RESEARCH

According to PennState University Libraries (2020), empirical research is grounded on watched and measured situations and gets information from actual occurrences than hypotheses or assumptions. That being the case, this empirical research was conducted to collect concrete information from students through interaction. Other than gathering actual knowledge the logical basis for this empirical research study was also based on the fundamentals for research, as described in Bryman (2012:5) that research is done to investigate an identified gap that has not been investigated. Also, Greenfield (2002:3) states that research is a mission for perceiving and acquiring information and a method to better the quality of human life. Therefore, this study intended to present a topic that is not published in the books and journals that cover open and distance learning in South Africa based on actual viewpoints provided by students. Additionally, it needed to address the problem of high dropouts among ODeL students in South Africa on a quest of improving their learning processes, specifically undergraduate students studying first-year modules. This is because if challenges facing students in foundation years are resolved according to their advice, there can be better chances of success for sustained learning since students studying the first-year modules or in the foundation years of ODeL can be the most challenging due to transition or becoming familiar to DE.

3.3 RESEARCH DESIGN

A research design is a logical outline of how an investigation will be conducted. Creswell and Creswell (2018:12) and McMillan and Schumacher (2014:28) define research design as procedures that are employed to conduct research. They provide direction in an investigation. The design for this study comprised a research paradigm, research approach, and research type. I utilised the interpretivist paradigm, a qualitative research approach, and the case study research type. The following subsections 3.3.1 to 3.3.3 provide the details of the research design.

3.3.1 Research paradigm

To improve the understanding of the causes leading to dropouts in South African ODeL this study adapted to the interpretivist paradigm. Chilisa (2012:31-35) believes that the characteristics of the interpretivist approach in research seek to understand the problem from the participants' perspective. Understanding the problem from the participants can be enhanced during the data collection when participants interpret their experiences related to the research problem. This can assist the researchers to understand the situation from the participants' viewpoints while exploring and understanding it inductively. As stated in Chapter 1 Section 1.8.1, Bloomberg and Volpe (2012:28-30) identify four major paradigms that researchers can employ for investigations, and these are post-positivism, social constructivism, critical theory, and pragmatism. Firstly, Bloomberg and Volpe (2019:44) claim that post-positivism believes that there is a single reality that can be measured and known, researchers basing their study on post-positivism use quantitative methods to measure this reality. Rehman and Alharthi (2016:53) discuss that positivists struggle to comprehend the social world as a natural phenomenon. Further, Rehman and Alharthi (2016:53) mention that positivists believe that, there is a cause-effect relationship among occurrences and if they are recognised, they can certainly be forecasted in the future. Secondly, Bloomberg and Volpe (2019:44-45) explain that in social constructivism/interpretivism it is believed that reality should be interpreted because there is no single reality and that researchers applying this paradigm use qualitative methods to explore multiple realities. Rehman and Alharthi (2016:55) elucidate that interpretivism does not accept any persistent constant norms to which truth should generally be accepted. Thirdly, Bloomberg and Volpe (2019:45) further discuss the critical theory paradigm, which is also referred to as advocacy or participatory framework. Bloomberg and Volpe (2019:45) argue that it is a paradigm that views the research connected with politics, it focuses on social justice thus, advocacy is essential. Rehman and Alharthi (2016:57) also state that the purpose of critical educational research is not only to clarify or perceive society but to bring changes to society. Lastly, Bloomberg and Volpe (2019:44) present the pragmatism paradigm which believes that realities are continually discussed and interpreted. Further, Bloomberg and Volpe (2019:44) mention that pragmatists believe that pragmatism is the best strategy to apply to fully understand the research problem.

Considering the context of this concerned research where I was seeking to understand the research problem from the participants' viewpoints, the most appropriate paradigm to

apply was the social constructivism / interpretivist. The work of Antwi and Hamza (2015:219) and Creswell and Creswell (2018:7-8) indicate that the interpretivist/social constructivist perspectives believe the world is constructed and interpreted by people through social systems with one another. Additionally, Bloomberg and Volpe (2012:29) point out that the goals of interpretivist research are to describe and interpret occurrences from shared meanings with others.

3.3.2 Research approach

This research was conducted utilising a qualitative research approach. Creswell (2014:4) identifies three types of research approaches namely: qualitative, quantitative, and mixed-method approach. Creswell (2014:4) distinguishes these approaches by elucidating that qualitative research is exploratory and seeks to understand underlying reasons or opinions and looks at phenomena on the why and not on the what only of an occurrence, while, quantitative research seeks to measure the problem through numerical data, and the mixed method which mixes the characteristics of both qualitative and quantitative approaches. Creswell (2014:4) further argues that this integration of qualitative and quantitative approaches delivers a healthier understanding of the research problem than using qualitative or quantitative research approaches distinctively. However, as stated in Creswell (2014:278-279), the major limitations of the mixed-method approach are that much of data collection is involved and it is more complex, consequently, time-consuming, therefore this study was conducted through the qualitative approach because it focused on understanding the phenomenon from those affected. Although I could have chosen the quantitative approach to conduct this research, the most suitable was the qualitative approach because it does not put the hypothesis before the investigation, all information needed to be obtained during the research process. Creswell (2014:4) describes a major characteristic of a qualitative approach as that it assumes that information is subjective contrary to a quantitative approach which assumes that information is objective made it suitable for this research. Dawson (2002:14) states that qualitative research attempts to obtain in-depth opinions from participants. Jackson, Drummond, and Camara (2007:25-26) also state that qualitative research does not introduce treatments or manipulate variables or impose operational definitions of variables on the participants. Rather, it lets the meaning emerge from the participants. It is more flexible in that it can adjust to the setting. Concepts, data collection tools, and data collection methods can be adjusted as

the research progresses. Additionally, Jackson et al. (2007:2) state that qualitative research aims to get a better understanding through direct experiences, truthful reporting, and quotations from real discussions with the participants. It aims to understand how the participants derive meaning from their surroundings and how their meaning influences their behaviour. Furthermore, Leedy and Ormrod (2005:133) mention that qualitative research focuses on incidences that happen in the real world and is involved in analysing those incidences in all their complexities. That being the case, utilising the qualitative approach, therefore enabled me to gain knowledge from the participants to perceive what was occurring in their lives. Table 3.1 summarises the values of qualitative research and their relevance to this current research.

Table 3.1: Summary of qualitative research

Principle	Relevance to this research
Aims to understand the phenomenon from those affected	I was able to obtain first-hand information from the participants who were affected by the challenges.
Themes are derived from the data collected.	Inductive data analysis helped me to develop themes and subthemes from the data I had collected.
Focuses on exploring the phenomenon	I was able to examine the research problem through interaction with those affected.
Rich description data	I was able to collect in-depth information from those affected by the phenomena.
Facts generation	By exploring the research problem first, I was able to identify ideas for what may be needed to solve the research problem.

Source: researcher's summary

3.3.3 Research Type

I conducted this investigation using a case study research type. McMillan and Schumacher (2014:32) state that case studies are investigations of individuals, society, or occurrences that focus on analysing matters within the boundaries of situations or organisations. These case studies involve an in-depth study of a situation that narrows

down a broad field of research into a single researchable unit. Similarly, Gerring (2011:6) elucidates that a case study can be described as an in-depth study of a single case to grasp the case on a larger class. Furthermore, Crocker (2009:14) claims that a case study is a design of inquiry on which the researcher develops an in-depth analysis of a bounded system, an individual, organisation, or an educational context. In this research, employing the case study research type, allowed me to investigate a research problem in a narrowed and detailed form at UNISA.

I found the case study relevant for this current research since Crocker (2009:16) confirms that case studies are also used in psychology and education. Additionally, Pickard (2007:85) states that the major strength of case studies is that data is collected and analysed within the real-life setting of the phenomenon. Therefore, case studies are valuable methods for exploring a problem that involves human behaviour and experiences, hence, I chose this research type for this investigation. The case for this concerned investigation was UNISA where students studying MAT1503, a first-year module were asked to describe their learning experiences. Embracing a case study also enabled me to investigate the occurrence in greater levels of depth by collecting comprehensive information through various students.

3.4 RESEARCH METHODS

Dawson (2002:27), says that research methods are the tools and procedures that researchers utilise to collect data when investigating. Thus, this section discusses how the participants for this investigation were selected. It also discusses the instruments that were used to collect data and how such instruments were used for data collection.

3.4.1 Selection of participants

I collected data from a South African ODeL university, namely UNISA, and of the possible pool participants had one thousand one hundred and twenty-four students as described in Section 1.9.1. A random sampling technique was applied for selecting the participants. There are two sampling techniques namely random and non-random sampling. Sarantakos (2013:169 &177) describes that the difference between these two types is the haphazard selection of participants or not. Random sampling offers all members in the

targeted possible pool of participants equal opportunities to be selected in the research and non-random sampling does not.

Under the random sampling technique, stratified purposive sampling was employed, where I chose to interview fifteen participants from students who were registered for MAT1503 in 2018 and or 2019. As stated in Section 1.8.1, stratified purposive sampling is a sampling method that divides the possible pool of participants into subgroups and randomly selects participants from each group according to key aspects.

Using the purposive stratified sampling method, I divided the selected participants into three subgroups, namely students who completed MAT1503 in 2018 and or 2019, students who failed MAT1503 in 2018 and registered for it again in 2019, and students who did not pass MAT1503 in 2018 and did not register again. Each subgroup had five participants. These selected participants would have significantly provided the viewpoints of all groups of students. However, eight participants finally agreed to participate in the investigation due to a lack of interest and trust. Among these eight students, two were achievers, five failed and reregistered although one dropped MAT1503 and registered for another course and one dropped out of UNISA studies completely. Some of the students believed that participating and offering their opinions will benefit future students while they had unpleasant learning experiences. The purpose of selecting students who had just studied the first-level module to participate in this research is their ability to reflect on their immediate experiences. Additionally, first-level modules can be the most challenging for many ODeL students especially if they are not familiar with distance learning. Above all, the statistics as described in the introduction Section 1.1 in Chapter 1 reflects that many distance learners drop out after one year of studying. The next section discusses how data collection was conducted.

3.4.2 Data collection

Data collection was done qualitatively realising the post-colonial research theory. In the post-colonial research theory, the research process is indigenised promoting the research to occur naturally (see Section 2.6.3). Collecting data qualitatively was important for this research because it helped me to obtain themes concerning the research problem from the participants' views. Data were collected using semi-structured interviews. The interview protocol for these interviews consisted of eleven open-ended questions (see Appendix D). The interviews for this investigation were initially meant to occur on the face-

to-face technique only, however, the interviews eventually occurred in online, telephone, and face-to-face interviews. This was done depending on the interviewees' choice for conducting the interviews.

The content of the protocol questions was based on the research problem of high dropouts in South African ODeL. The questions focused on the possible causes of high dropouts and what can be done to promote sustained learning. During data collection, the opportunity for face-to-face interviews was possible with some participants, while others who lived at a distance opted for telephonic or online interviews. However, the in-depth exploration was still possible even though interviews were conducted via different types of interviews. Participants did express their viewpoints regarding the research problem and provided valuable information. During data collection, I ensured that participants accessed their data through emails, written notes, or WhatsApp messages to allow them to provide more clarification or omit certain data.

The interviews were conducted according to the interviewee's preferences. Five interviews were done on a face-to-face technique, two were performed telephonically and one was conducted using an online technique (email). For face-to-face interviews, the interviewees chose the venues where the interview sessions were to be conducted. For telephonic interviews, the interviewees informed me of the most convenient time for the interviews. For online interviews, the participant was sent an email and further clarifications regarding the questions were done using emails and WhatsApp communication. At the beginning of each face-to-face interview session, I showed the research ethics certificate to the participant, with all information regarding the research and the contact details of the supervisor and the university research committee. This confirmed the genuineness of the research because the certificate had UNISA letterhead and the contact details of the supervisor were also written. Also, the name on my student card was the same as what was written on the clearance certificate. This ensured participant's relief. For the online interview, I emailed the participant the ethical clearance certificate, interview questions, and participant information sheet that clarified the nature, and the rationale of the research. I also sent the consent form that required the participants to sign upon agreeing to participate in the research. The telephonic interviewees were also emailed the ethical clearance certificate, interview questions, participant information

sheet that explained the nature and the rationale of the research, and the consent form before the interview sessions.

In the interest of this investigation, the students' knowledge of the current challenges and their opinions on what can improve their learning experiences in ODeL could create positive changes to South African ODeL. As mentioned above, at the beginning of this section, data were collected from different types of students namely, those who passed, those who failed and reregistered, and those who failed and did not register again. The symbolic interactionism principle was embraced during data collection by examining the opinions that these students placed on the interview questions (see Section 2.6.1). The justification of collecting data from these different types of student participants is briefly discussed in the next three subsections.

3.4.2.1 Rationale to interview students who passed

Two students who passed MAT1503 were interviewed. The choice to interview these students was because sharing their methods of studying or what they did to ensure to pass the module can help other students to follow the same procedures or enlighten the stakeholders to introduce those procedures in their service delivery. The information from these students was therefore important.

3.4.2.2 Rationale to interview students who repeated the module.

I also interviewed four students who had failed MAT1503 in 2018 and reregistered in 2019. The information from these students regarding the challenges they faced is valuable to the stakeholders to consider best practices to assist students facing the same challenges to succeed. Also, at the time of the interviews, the participants shared the procedures they were employing to ensure that they pass. Through reflection, they can contribute to aid stakeholders to formulate related procedures to facilitate students' success. The information is also significant to the stakeholder to plan ways to meet the students' effort considerably.

3.4.2.3 Rationale to interview dropped out students.

Two students dropped MAT1503, one discontinued studying at UNISA and the other one dropped the module and registered for another qualification that did include MAT1503. A student who had dropped out of his studies at UNISA was also interviewed. I intended to interview more students; however, some students were not willing to share their experiences and indicated that they did not want to unlock memories they were trying to forget. This also illustrates how traumatic this experience was for these students. The information from these students was valuable because the challenges they faced are important for the stakeholders and decision-makers at UNISA to plan a way forward with attempts to enhance students' success. Before data collection, it was important to test the suitability and validity of the data collection instrument (the interview questions) through a pilot study. This process is discussed in the next section.

3.4.3 Pilot study

The pilot study was the first stage of data collection. A pilot study is a mini version of the actual data collection procedure. Fink (2010:184-185) describes a pilot study as a trial study that pre-test a research instrument or procedure of the main research. It helps to test the effectiveness of such instruments or procedures. In this current research, the pilot study was conducted to test if the participants could easily understand the interview questions. It also tested the interview duration and to determine whether the research questions would yield answers. I asked two students from the targeted possible pool of participants who were undergraduates and were registered for first-year modules but were not part of the actual group of participants, to answer the questions. The pilot study helped me to re-evaluate the questions and schedule time for the interviews by checking the duration it took to complete each interview and whether the questions were difficult. The pilot study was useful for determining if the research was feasible since no changes were made to the questions, the participants answered them without difficulty. The next section describes the interviews that were employed for data collection.

3.4.4 Interviews

According to Bhattacharjee (2012:78), an interview is described as a dialogue between two or more people, where the interviewer asks questions to gather information from the interviewee/s. Interviews are used in many situations such as counselling, journalism,

psychotherapy, and in research to understand the experiences of others. In this study, interviewing was incorporated to gather students' viewpoints during the data collection.

The Ubuntu philosophy engages the *dare* concept that investigates human opinions (see Section 2.6.2). Pickard (2007:172) states that the purpose of interviews is to seek an explanation of the meanings of situations or occurrences from the eyes of the participants. These interviews are done to understand the opinions of the interviewees and they allow the participants to provide information in their own words. Consequently, this benefits researchers when attempting to gather detailed information and to understand social processes. In the following subsection, I elucidate how interviews were conducted.

3.4.4.1 How to conduct interviews

Interviewing is a technique that needs to be approached with sensitivity and tactfulness to sustain the dialogue. The Ubuntu philosophy is based on empathy and preserving contentedness (see Section 2.6.2) Bhattacharjee (2012:78) states that interviews are performed by skilled interviewers. Additionally, Downson (2002:70) relates that for participants to share their personal information, a rapport should be established between the interviewer and the interviewee. In that case, I searched for literature to learn how to successfully conduct interviews with the participants. Dowson (2002:70-73) provides the basics which I mastered for establishing a rapport when meeting with the interviewee/s and they are discussed next

1. Treat interviewees with respect:

I was punctual, on time, and not in a haste to commence the interview unless the interviewee requested to do so. The conversations were carried out politely by creating a comfortable atmosphere for the interviewer and the interviewee.

2. Your appearance and behaviour matter to the expectations of your interviewee:

I made sure that the expectations of the interviewees were fulfilled by dressing and behaving professionally, and I was full of confidence.

Reflect on body language: I maintained my confidence throughout the interviews, and I was not shy or nervous. During conversations, I kept eye-contact with the interviewees to show interest.

Do not overrun the interviewee's space. I always sat at an angle to the interviewee and not directly opposite. I did not sit by the interviewee's side because I wanted to avoid the interviewee's keep turning their heads resulting in the interviews being uncomfortable.

Successful interviewing results in successful data gathering. I equipped myself with the above-mentioned guidelines and had the appropriate skills for maintaining conversations in all the interview sessions. The following subsection explains the strengths and weaknesses of interviews.

3.4.4.2 Strengths and weaknesses of interviews

According to Greenfield (2002:209-210), the strengths of using interviews in research are that they offer opportunities for face-to-face interaction with the participants and in-depth exploration of the research problem because data is collected in a natural setting and, through a dialogue. Although interviews are valuable instruments for understanding social processes, they have their limitations too. Greenfield (2002:210) states that the interpretation of the findings can be biased on the fact that it is influenced by the researchers. They are also open to misinterpretations because of cultural differences. I attempted to overcome these weaknesses by giving the analysed data to the participants so they could confirm if what I reported was true. To collect data, I utilised the semi-structured interviewing type which is discussed in the subsequent section.

3.4.4.3 Types of interviews

There are various types of qualitative interviews. Dowson (2002:27-30) identifies unstructured, semi-structured, and structured interviews that researchers can employ for interviewing. Dowson (2002:27-30) points out the difference amongst these type of interviews as unstructured interviews try to obtain a comprehensive understanding of the participants' viewpoint concerning a situation, semi-structured interviews seek to gather

specific information that can be compared to information that was obtained from other interviews and structured interviews asks a series of same questions to all interviewees. Similarly, Tharenou et al (2007:103-104) elucidate that unstructured interviews are open-ended and conducted with no pre-determined questions, semi-structured interviews comprise an overall topic, general themes, targeted issues, and questions but they are flexible and structured interviews comprise of pre-set standardised questions that are asked sequentially. For this research report, I discuss semi-structured interviews in more detail because they were used for this research. Tharenou et al (2007:104) mention that semi-structured interviews focus on open-ended communication of the incidents. Downson (2002:28-29) points out that in semi-structured interviews, researchers use the same questions in each interview, but the interviews remain flexible for other information to arise. I chose this type of interview because of its flexibility in questioning the interviewees. Using the semi-structured interviews, three key groups from the selected participants of students who were registered for the first-year module MAT1503 in 2018 and/or 2019 were interviewed by face-to-face, telephonically, and online techniques which are discussed next.

3.4.4.4 Interview techniques

Interview techniques refer to the methods of interview utilised to obtain data from the participant. The following section discusses three interview techniques that were used for data collection in this study.

Face-to-face interviews

Face-to-face interviewing was the initial data collection technique for this research, however, three participants preferred online or telephonic interviewing. This resulted in five face-to-face interviews. Bhattacharjee, (2012:78) explains that face-to-face interviews refer to where the interviewer physically meets the interviewee and asks questions directly. Face-to-face interviews were conducted with five participants. These participants responded to the invitation letter to participate in this research agreeing to do face-to-face interviews. The dates and times for these interviews were scheduled at participants' convenience. I emailed the interview questions before the interview meeting. Each interview lasted approximately an hour, I wrote notes and probed for more information and

clarification after each question. Using this interview technique, I was able to notice the interviewee's body language during data collection and discussed the body language to ensure interviewees' comfortability so that accurate data was provided. Face-to-face interviews provided opportunities to adapt the questions to the interviewee's level of language so that questions were better understood. Complete answers were also obtainable in the case of misinterpretation of the questions.

Online interviews

According to Salmons (2015: Xvi), online interviews are interviews done using ICTs. The upsurge of access to the internet and technology is making it easier to conduct online interviews. Since more and more people have access to the internet, collecting data through the internet is now easier and swift. Including online interviews in the data collection, enabled me to access the student that was living at a distance, who responded in their own time, and there was no pressure from the interviewer to schedule an interview time. An online interview was done with one participant. This interviewee opted for an online interview because it was convenient for the participant. I emailed the interview questions to the participant together with the ethical clearance letter and a letter approved by the research committee that explained the nature and the purpose of the investigation. The participant returned his responses after one week. On the responses, the participant provided his contact numbers if any clarification was needed. I communicated with the participant for the second time through a WhatsApp call to get clarification on some of the responses. This second session through WhatsApp was approximately fifteen minutes.

Telephonic interviews

Two participants of this investigation chose to do their interviews telephonically. Bhattacharjee, (2012:78) mentions that in telephonic interviews, the interviewer interacts with the interviewees over the telephone. These telephonic interviews in this research were also used to efficiently collect data from these two participants since they were unable to meet me physically. To conduct the interviews, I emailed the interviewees the interview questions and requested them to reply by scheduling the interview times convenient to them. The interview duration for the telephonic interviews was approximately one hour each. This is because I had to write down notes and ask for

clarification on the information provided after each question. Through the telephonic interviews, I was also able to probe for deeper clarification from the participants.

3.5 DATA ANALYSIS

The data were analysed inductively. McMillan and Schumacher (2014:395) describe inductive data analysis as the process where researchers create meaning from the data they collect. Text data collected from the interviews were examined by searching for themes using the thematic analysis technique. According to Bryman (2012:578) thematic analysis is used to identify themes when examining data for qualitative research. The data analysis process was done using the six phases provided in Braun and Clarke (2006:86) where the initial phase was examination and organization of the data. This was done by reading through the notes and getting a sense of all data collected. The second phase was labelling the text and coding the data (Braun & Clarke, 2006:88). After coding data, I moved to the third phase by refining the codes and combining similar codes, searching for themes (Braun & Clarke, 2006:89). This led to the development of themes. Phase four was the stage for reviewing the themes which involved refining the themes that were developed in phase three (Braun & Clarke, 2006:91). In phase five, I defined and name the themes (Braun & Clarke, 2006:92). Finally, in phase six, producing the report stage, I linked related themes and therefore was able to describe the data of the qualitative findings (Braun & Clarke, 2006:93). This data analysis was characterised by objectivity so that the research findings were acceptable. I always checked that the analysis process was not biased.

3.6 TRUSTWORTHINESS

I had to address the trustworthiness of the research findings. Bloomberg and Volpe (2012:112) discuss that trustworthiness is established when a researcher demonstrates confirmability, dependability, transferability, and credibility of the findings of the investigation. Reliability in qualitative research, as mentioned in Bloomberg and Volpe (2012:112), is centred on consistency which concerns the trustworthiness that two different researchers studying the same phenomenon should be able to produce similar findings. However, qualitative studies are disposed to various threats that can hamper their credibility. Whittemore, Chase, and Mandle (2001:530–531) describe these threats

as distortion, bias, and dogma. Therefore, to determine the confirmability, dependability, transferability, and credibility of the research findings, I utilised the following techniques provided in Bloomberg and Volpe (2012:112-113) and various other authors as explained in subsections 3.6.1 to 3.6.4.

3.6.1 Credibility

According to Anney (2015:276) credibility refers to the demonstration that the findings of the research are believable. The work of Leedy (1993:141) states that qualitative studies seek to understand the occurrences from the participants' views because they are the ones who can accurately judge if the findings are credible. As follows, I, as advised in Anney (2015:276-277) did a member check strategy. Anney (2015:276) states that a member check strategy is a method of improving the quality of qualitative data that allows the participants to read through the data findings. I emailed the research participants their analysed data to read through it and provide their feedback. The purpose of this member check strategy was to enquire if the data analysis has resonance with the participants' experiences. The participants provided their feedback, agreeing that the analysis was the same as the data they had provided during the interviews, consequently the credibility of the research findings was improved.

3.6.2 Transferability

Anney (2015:278) elucidates that transferability refers to when the findings of qualitative research can be transferred or generalised in similar settings. I enabled the transferability of the research findings to similar contexts by following the steps provided in Anney (2015:278) by 1. Providing a full description, I accurately described the context of the research so its findings can be related to other contexts. 2. Do purposive sampling, which assisted me to centre the research on key participants with knowledge of the phenomenon being investigated.

3.6.3 Dependability

Shenton (2004:71) mentions that dependability is the degree that the research can be repeated in a similar setting and yield similar findings. To ensure that the repeated study

obtain similar findings as to this completed research, I provided adequate information about the research including any changes that occurred during the research process. I also performed an audit inquiry by asking my supervisor to critically examine the research process and the data analysis to determine the dependability of the findings.

3.6.4 Confirmability

According to Shenton (2004:72), confirmability refers to the degree to which the findings of the study could be confirmed by other people. This means that the findings are only based on the information that was provided by the participants and do not hold any bias from the researcher's interests. Thus, research findings must be corroborated by other people. In this research, I established its conformability by doing an audit trail during which my supervisor and the participants examined the research report.

The supervisor and participants examined each step of the data analysis until the decision stage. This helped them to identify whether the findings thoroughly reflect the participants' information. Furthermore, I checked and cross-checked the data throughout the study.

3.7 ETHICAL MEASURES

Booyse et al (2011:34) state that ethical principles must be practical during the research process seeing that the findings of the research are referred to by others, therefore data must be reported accurately and honestly to ascertain its usefulness. That being the case, in this research, I was honest in respect of the whole research process, including generating and analysing data, publishing findings, and acknowledging the sources. I did not commit plagiarism, piracy, falsification, or the fabrication of the findings at any stage of the research, and the findings of the research were reported exactly as they were collected.

In respect of the research principles regarding interacting with human subjects as urged in (UNISA 2013:9-17), I sought permission to conduct this research with the students at UNISA from the research committee. The ethical clearance certificate is found at the end of this research report in Appendix A. After the approval for the research to occur,

information regarding students was requested from the department. I then contacted the students and initiated the data collection through interviews.

On the same token concerning the ethics of interacting with participants, I employed the Ubuntu philosophy theory principles, supporting it with the postcolonial ethical research theory. The principles of these theories guided me to respect and create a pleasant climate by adapting to the cultural values of the participants to get the maximum benefit from the research. Letseka and Koenane (2016) say Ubuntu does not only affect how research ought to be conceived at UNISA but also influence the way researchers conduct themselves in the field. Thus, I embraced these principles of valuing and respecting each participant throughout the investigation. Furthermore, the protocols urged in (UNISA 2013:10-16) for research involving human participants, such as privacy of information and consideration of potential harm were adhered to throughout the research. The details are discussed in the next section.

3.7.1 Confidentiality

Babbie (2010:67), mentions that confidentiality refers to when participants are given assurance by the researcher that the information they provide will not be shared or disclosed to anyone. Therefore, the settings and participants are not identifiable in the research report. They are reported anonymously and kept confidential, respecting participants' privacy. In the field, I respected and accepted how much the participants were willing to reveal, I did not insist or continue to probe for more information when the participant was hesitant to reveal more information. The intention was not to make the participants uncomfortable or emotional. Additionally, I did not share the information gathered from the participants with other participants or other people. After the study was completed, the notes from the data collection process and the consent letters were removed from the computer hard drive and they were stored on a disc. The disc will be kept in a locked cupboard for five years in case the university or research committee needs it. After five years the disc will be permanently destroyed by the disc shredder. Besides maintaining the participants' privacy, I did not cite any names of the participants. To differentiate between the eight participants, eight pseudonyms were used so that the research report was understandable (see Section 4.2.1).

3.7.2 Informed consent

I followed informed consent rules like understanding and accepting participants' rights to decline participation or withdrawing from the research once it has started. The interviewees were also informed of the intended use of data being collected. I elucidated that participating in the research was voluntary and they could withdraw at any time, and they would not be penalised at all. Furthermore, I explained the reason for the investigation and how the data was to be collected, analysed, and stored. This was done so they understood what they were participating in. The participants who had agreed and accepted the conditions of the research and interview process were asked to sign the informed consent which contained the briefing dates and the name of the person being briefed. This was done in line with UNISA protocols which are provided in (UNISA 2013:12). The sample of the consent form which was signed by the participants can be found in Appendix E.

3.7.3 Provision of debriefing, counselling, and additional information

Apprising of the research participants is done through debriefing and counselling. Saranatakos (2013:18-19) emphasises that it is a crucial and mandatory procedure to enlighten the participants on what they are being involved in. The debriefing and counselling were done to determine their understanding and clarity of the interview questions. Participants had received the interview questions before the scheduled interview time. I counselled and debriefed the participants by asking if they understood the interviewing questions and informing them that the purpose of collecting data using those questions was to assist ODeL stakeholders to realise that there are some students in the ODeL programmes facing challenges. Next, I went on to explain that the conversations during the interviews were to be written down and they could read the written texts and if necessary, they could make changes. Participants were further informed that they could use the contact information on the participant information sheet that I had sent inviting them to participate in the research (see Appendix C) in the event, they wished to know more about the research.

3.7.4 Risk concern

Regarding risk concern, the only possible risk was the participants' potential discomfort. Since this investigation was exploratory research, the effect of interviewing caused a little discomfort to participants. The interview protocol used to collect data was designed to assist student participants to describe their experiences. The questions used for the interviews involved some sensitive aspects that could have caused some sort of distraction to the participants. Upon noticing the participants' discomfort, I paused the interview and asked if participants were comfortable and wished to continue, stop, or reschedule for another day. However, none of the participants felt the need to stop the interviews. Essentially, the risks involved were very low, instead, the possible benefits from the findings of this study offset the risks.

3.8 CONCLUSION

This chapter provided an account of how the study in this research report occurred. Firstly, I began by elucidating the relevance of conducting the research. Secondly, the research design was discussed by explaining, that the social constructivism/ interpretivist paradigm was employed for this, supported by a qualitative approach and a case study. Thirdly a discussion of the research methods that were adopted was provided by explaining that the participants were selected on stratified purposive sampling for data collection. Additionally, I mentioned that data were collected from a variety of participants employing the semi-structured interviewing procedure utilising face-to-face, telephonic, and online interview. The data collected were analysed inductively. Finally, the explanation of the trustworthiness of the study was maintained. The chapter ended with a discussion of the ethical considerations of the research. In the subsequent chapter, an account of the data analysis and discussion of the data findings of the investigation is provided.

CHAPTER 4

DATA ANALYSIS, FINDINGS, AND DISCUSSION

4.1 INTRODUCTION

In the previous chapter, the research methodology used for this study was discussed. To conduct the relevant study, responses of the eight students' participants were collected in the form of in-depth interviews using semi-structured questions. The rationale for data gathering as well as the analysis of the data was also explained in Chapter 3. In this chapter, the findings of the data analysis are presented according to themes. The examination of the data was done using a thematic analytical framework as described in Braun, Clarke, Hayfield, and Terry (2019:217-230), where different interview questions and responses were divided into themes and sub-themes, attempting to answer the research question. The analysis is followed by a summary of the findings, where the overall assertions regarding the aspects of strategies for supporting sustained learning in the domains of ODeL are discussed.

4.2 RESEARCH FINDINGS

This section focuses on providing the research findings of the empirical enquiry. It delivers the findings obtained from the interviews with the eight participants in Section 4.2.1.

4.2.1 Participants' profiles

This section provides information about the participants of this study. Table 4.1 presents the profile of each participant. To distinguish between the participants for example as reflected in Table 4.1 and text, the participants are referred to with their serial number as Par #1 or Par #2 and so on.

Table 4.1: Participants' details

Participants	Educational qualification	Registration status for the 2019 academic year at UNISA	MAT1503 registration (2018/2019)- first enrolment in ODeL	Failed or passed (1 st Registration)
Par#1	First-year ODeL student in 2018. Enrolled in BSc in Computer Science	Yes	Yes, first registration 2018 first semester.	Passed
Par#2	Second-year ODeL student in 2018 studying Bed (FET and Senior Phase)	Yes	Yes, first registration in 2018 second semester and registered again in 2019 first semester.	Failed
Par#3	First-year ODeL student in 2018 studying BSc	Yes	Yes, first registration in 2018 second semester and registered again in 2019 first semester.	Failed
Par#4	First-year ODeL student in 2018 studying BSc in computing	Yes	Yes First registration in 2018 first semester registered again	Failed

Participants	Educational qualification	Registration status for the 2019 academic year at UNISA	MAT1503 registration (2018/2019)- first enrolment in ODeL	Failed or passed (1 st Registration)
			in 2019 first semester.	
Par#5	First-year ODeL student in 2018 studying B Ed. (senior and FET phases)	Not registered anymore	Yes, first registration in 2018 second semester. Dropped out from UNISA studies.	Failed
Par#6	Registered for B. Sc. majoring in Physics and Mathematics. Not a first-year student in ODeL	Yes	No, first registration was in 2016, dropped out and registered again in 2019	Failed
Par#7	Not a first-year ODeL student in 2018. Currently studying B.Ed in the senior and FET Phase. (did his higher certificate through ODeL at (UNISA)	Yes	Yes, first registration 2018 the second semester.	Passed
Par#8	A first-year student in 2018. Studying Diploma in Mechanical engineering.	Yes	Yes, first registration second semester 2018. Did not register for the module again.	Failed.

Table 4.1 illustrates that seven participants in this study were registered for the 2019 academic year. The participants were pursuing various academic courses and one participant had dropped out of UNISA studies. Among the seven registered students, not all of them can be seen to have passed the module MAT1503 on first registration. Table 4.1 indicates that two participants passed after their first registration and four participants failed and reregistered while one dropped the module MAT1503. Furthermore, of those

who had failed and reregistered, four of them had registered for the same module for the second time and their first registration was in either the 2018 first or second semester. However, one participant had failed the module in 2016, dropped out of UNISA studies, and registered again in 2019.

The data of the perceptions of the above participants were examined using the thematic analysis technique as described in Section 3.5. The themes established from the thematic analysis are discussed in the following section.

4.2.2 Discussions of the themes

In this section, four themes developed from the thematic analysis are presented in Table 4.2. These themes were developed based on the questions posed to each of the participants, which were then used for addressing the research questions of this study. Each of the broad themes has been sub-divided into several sub-themes.

Table 4.2: Themes and Sub-themes

Themes	Sub-Themes
Theme 1: Learning experience of the student	Learning experience if registered as a first-year ODeL student
	Learning experience if registered not as a first-year ODeL student
Theme 2: The impact of the learning experience	The impact of the learning experience on the module
Theme 3: Barriers in the learning experience	Barriers encountered during the learning experiences
	Measures that were taken by the participants to overcome the barriers
Theme 4: Strategies or interventions for sustained learning	Student perception regarding strategies /interventions to support sustained learning in ODeL
	Recommended strategies or interventions considered to be implemented in South African ODeL to support sustained learning.

in South African ODeL	The efficacy of the recommended strategies /interventions to ODeL students.
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Theme 1, the ***Learning experience of the student*** is connected to sub-research question 1 which asks: *What are the viewpoints of students about their learning experiences while studying the first-year module.* The theme ***Learning experience of the student*** is one of the most crucial themes of this relevant research in the aspect of exploring the challenges faced by students and current performances in the ODeL framework in the South African context. Two types of experiences were recorded, namely experiences of those students who were registered for MAT1503 as first-year students in ODeL and experiences of those who were registered for MAT1503, not as first-year students.

Theme 2, ***The impact of the learning experiences*** was to analyse how students were affected or benefitted by ODeL learning experiences. This theme is linked to the sub-research question 2: *How do the opinions of students influence their motivation to continue studying?* The aim is to discover the impact of the learning experiences to students, that is the motivation or demotivation to continue studying. This theme intended to examine the current performances and efficiency of the South African ODeL with regards to the students' circumstances, thereby determining exactly how it influences them to continue studying or to drop-out.

Theme 3 is that of the ***barriers in the learning experience*** and it was recognised to study the barriers experienced by the participants and how they overcame such barriers. This theme is connected sub research question 3: *What strategies do students suggest for a positive learning experience?* The focus of this theme was to establish techniques employed by students to overcome learning barriers if they faced any or get suggestions of what would have helped them to overcome the barriers faced if they failed to overcome them. Techniques used by students who overcame the barriers and suggestions put forward by students who failed to overcome the barriers for conquering the barriers faced would be recommended as interventions for promoting sustained learning in South African ODeL. The theme is divided into two sub-themes, one analysing the barriers and the other highlighting the measures taken by the students to mitigate such barriers.

Theme 4 for this study is about the **strategies or interventions** necessary in the domain of South African ODeL reflecting on UNISA practices. The theme Strategies or interventions for sustained learning in South African ODeL is associated with the main research question: *What are the strategies for supporting sustained learning in Open Distance and e-Learning in a South African context?* The sub-themes developed in this aspect, report on the participants' perceptions considering the need for strategies or interventions, suggestions for strategies or interventions needed to support sustained learning against the current strategies taken by UNISA, and the efficacy of those strategies suggested. The following Section 4.2.3 is the thematic analysis of the themes about data provided by the participants.

4.2.3 Thematic analysis

The responses gathered from the interviews with the eight participants, whose profiles are provided in Table 4.1 have been organised and interpreted according to themes and sub-themes in Table 4.2

4.2.3.1 Theme 1: Learning experience of the student

To obtain an insight into the students' learning experiences in South African ODeL this study interviewed eight students at UNISA. It was important to understand the insights regarding the experiences of both students registered as first-year students and those registered for the first-year module but not as first-year students in ODeL in the academic years 2018/2019 as their experiences may differ. The learning experiences of the participants are discussed as learning experience if registered as a first-year ODeL student and learning experience if registered not as a first-year ODeL student.

a. Learning experience if registered as a first-year ODeL student

Of the selected eight participants, five students fell into this category and responded to this question, explaining their experiences. These five students reported that the MAT1503 module is difficult to complete, especially for distance students without the assistance of the instructors. Although, one participant also raised a difficult experience

of not affording to buy a prescribed textbook the participants mainly highlighted the difficulties in studying mathematics in ODeL.

Par#1 stated, (see Appendix F)

At first, it was hard, having the pressure to keep up with studying at a distance without tutors. However, I developed strong self-discipline in that getting through my studies depended mainly on me.

Par#1 was seen to have realised that the success of distance learning, heavily depends on the learner. Self-motivation among distance students was seen as an important skill to develop as it yields positive outcomes, this was apparent in the case of Par#1, although MAT1503 was difficult he managed to pass the module on the first attempt. According to Musingafi et al. (2015: 62), self-motivation and self-direction are important characteristics to overcome difficulties and to complete distance education courses.

Par#3 said

The learning experiences were very difficult; I did not cope with studying Mathematics on my own.

Par#4 stated,

It was difficult because of the lack of support from the university and studying Maths on my own proved to be impossible.

Par#4 further said,

The university did not offer any tutorials for the module. On the myUnisa discussion forum, the lecturer was not participating and there were only students who were, like me, not understanding the concepts.

The absence of instructors for learning support is a demotivating factor among distance learners because they feel alone without guidance. This notion is well supported in Zuhairi

(2019:3) where the author mentioned that in distance education, interacting with students in training is vital to promote perseverance and improved academic achievement. While Par#3 and par#4 faced the challenges of the learning matter which was difficult to comprehend and the lack of learning support from the university and instructors Par#5 faced an additional challenge through lack of funds.

Par#5 said,

My learning experiences were extremely difficult because I had financial barriers, I could not afford to buy the prescribed textbook.

Financial challenges are common in distance students as revealed by Ohene and Essuman (2014:162-169) in a study conducted in Ghana see Section 2.5. Also, Ohene and Essuman (2014:166) affirm that many DE students experience financial barriers by lacking enough funds for the costs of their courses.

Par#8 pointed out the absence of a comprehensively covered syllabus as well as enough examples and worked-out sums in the learning materials. Par#8 remarked,

Most of the topics on our study guide do not have enough examples to prepare for our exams and sometimes they ask things in the exams that are not properly covered in the study guide.

This in turn led to a challenge in the learning experiences, with the participant perceiving that those questions in the examination were not properly presented and explained in the study material.

The above quotations of the first-year ODeL students' viewpoints generally show that the learning experiences of the participants were that they found ODeL studying to be challenging credited mainly by lack of learning support and financial barriers. The next subtheme covers the exploration of students who were registered for the first-year module MAT1503 but not as first-year students.

b. Learning experience if registered not as a first-year ODeL student

The selected participants for the research included students who were registered for MAT1503 in 2018/2019, not as first-year ODeL students. Three such students, Par#2, 6, 7 were asked to reflect on their ODeL experience regarding the module in 2018 or 2019 or both.

Par#2 said,

My learning experience was challenging. I think more still needs to be done regarding this module. Maths needs too much work and concentration; it would be of great help if lecturers would also offer tutorials through DVDs or weekend classes.

Additionally, Par#6 said,

It was challenging because I needed to have internet access daily to communicate with the lecturer. I suggest that instructors need to provide supplementary videos.

In this statement, Par#6 mentioned that studying the module on his own was difficult as he needed to interact with the instructor daily but did not have internet access to do so. Lack of access to the Internet was also one of the most reported challenges faced by ODeL students at ZOU in 2015 refer to Section 2.5. Correspondingly, Rahman (2014:166) claims that in distance learning, computers, and the Internet are the ICTs that best allows communication and collaboration learning. Thus, the Internet access is best suited when attempting to improve students' achievements in distance education. Par# 6 further suggested that instructors may provide DVDs with recorded lessons to assist in understanding the lessons. This is to reach out to students facing the Internet access challenges, for communication with lecturers.

However, Par#7 had a different learning experience from the other participants. Par#7 pointed out that the experience was not challenging, and this was attributed to the experience the participant had in distance learning. The participant stated:

My learning experience was not so difficult because I was already used to studying via distance learning when I did my higher certificate.

The experiences of students who were registered not as first-year ODeL students varied. One participant indicated that his experience in distance learning made him undergo MAT1503 less difficult while the other two participants still found MAT1503 challenging regardless of their experience of studying in the ODeL context. On that note, Par#2 expressed that although he was no longer a first-year student in ODeL, he found MAT1503 very challenging. This may also signify that factors leading to dropouts are results of varying factors such as the complexity of the module, lack of resources, and not necessarily because of a lack of ODeL experience. The following section contains the discussion of how the learning experiences impacted the students' studies of both first-year and non-first-year ODeL students.

4.2.3.2 Theme 2: The impact of the learning experience

The previous theme explored the learning experiences of students while studying MAT1503. This theme intended to understand the impact of such learning experiences to students by requesting them to narrate the effects of the learning experiences to their studies. It was crucial to analyse the effects of these learning experiences as perceived by students to become aware of the factors that may be leading to high drop outs in South African ODeL. Data collected from the students generated diverse answers and perceptions that are provided in next subheading.

a. *The impact of the learning experiences on the module results of the participants*

Under this notion, five participants who were registered for the first time in ODeL indicated they all had challenging experiences. Two of the three participants who had been previously registered in ODeL still had challenging experiences, while one had a favourable experience. This section is the examination of how such experiences impacted the results of the module. The responses were recorded as follows.

Par#1 said

I passed the module. I can't possibly say the bad learning experience impacted badly on my results instead it helped me in other modules that needed one to understand some concepts in MAT1503, so it led to less studying for me.

In this statement, Par#1 explained that challenging learning experiences did not negatively impact the results of the module because he passed it. Instead, the demanding experiences led him to study harder which made other modules related to MAT1503 easier for him.

However, according to Par#2:

Yes, I failed. MAT1503 was so challenging, I went to enquire about tutorial classes for this module.....and was told that there were no tutorial classes for it.

Par#3 also said

Yes, I failed the module.

Par#4: responded

Yes, it had an impact on my results because I failed. I believe if the learning experiences were slightly favourable, I would have done better.

Par#5 highlighted that his negative outcome on MAT1503 was not only caused by a lack of learning support from the university but also by not having a textbook. Financial constraints among ODeL students were also stated in the studies conducted in Ghana and Zimbabwe in 2014 and 2015 respectively as described in Section 2.5.

Par#5 said,

.... having no textbook made it impossible to do well on the module.

Par#6 stated.

Yes, I failed the module.

Par#8 denoted,

Yes, I failed. Obviously, not understanding the learning content can be demotivating.

The presence of the negative impact of the learning experiences is indicated by Par# 2,3,4,5,6 and 8. These six participants can be seen to assert that the effects of their challenging learning experiences for MAT1503 resulted in negative results. On the other hand, the pleasant learning experiences encountered by Par#7 impacted positively on the results of the module in question.

Par#7 remarked,

Yes. I passed because I had no difficulties, and I am also a bit mature and ready to study.

In this statement, Par#7 mentioned that the pleasant learning experience he had while studying MAT1503 impacted him positively, consequently he passed the module. He also clarified that the positive learning experience was a result of him being mature and determined to learn.

In a nutshell, out of the eight participants, the challenging learning experience endured by seven participants impacted negatively on six participants while one outsmarted the challenges. The positive learning experience encountered by one participant likewise impacted positively. The following section is the discussion of the next theme that focused on discovering the barriers to learning that participants encountered.

4.2.3.3 Theme 3: Barriers in the learning experiences

To develop robust insights into the need and the nature of strategies and support interventions, it is crucial to have a proper understanding of the barriers in the domain of learning experiences of the students enrolled for ODeL in the concerned module. This is important as the gaps and problems in the service provider are the main reasons behind issues of student retention and can be understood from the findings.

a. *Barriers encountered during the learning experience*

Under this subtheme, participants were asked to describe the barriers they faced in the learning process. Of the primary barriers, the most common one, as cited by all participants, was the absence of any kind of learning support from the university.

According to par# 5:

The huge barrier was the lack of support from the university. They did not offer tutorials for the module.

Similarly, Par#1 said

Yes, at first, I had lots of barriers but the major one was that I had no learning support.

Par#2 also said

I didn't get any learning support for this module.

Additionally, participant 2 stated,

I feel the UNISA staff and management are not doing enough to deliver efficient services to students. At times when we need help from the instructors, their telephones are unreachable and even some of their email addresses are unreachable, or if the emails get through, we don't get the required feedback on time.

Par#2 indicated that instructors' interactions with their ODeL students in ensuring immediate feedbacks are important motivating factors in students learning processes and can impact positively. Budiman (2013:9) states that quick and inspiring responses are important to distance learners. Additionally, Musingafi et al (2015:63) explain that students feel confused, worried, and sometimes irritated from lack of quick or well-defined feedback from their instructors. Thus, delayed, and ineffective feedback can add a burden to learners who are struggling with the isolation and the remote nature of distance learning.

Furthermore Par#4 stated

Learning support from the university was poor, tutorials were not offered at the institution where I go for learner support.

Par#6 said

I faced the barrier of having no one to consult with.

In addition to the unavailability of instructors in providing learning support, Par# 3 stated that she "struggled to understand the concepts". Par# 8 said that although not much support is needed for studying in the presence of a disciplined attitude, the need for lessons on videos was necessary because:

...sometimes we can read and still not understand the concepts.

Student support proves to be a crucial determining factor in ODeL achievements. Zuhairi (2019: 3) clarified that distance students require support for three reasons which are the need for support, for reducing dropouts, and for learning.

Late delivery of study materials was also pointed out as another barrier by Par#7. Delayed delivery of study materials brings so many disadvantages to students such as preparing assignments hastily to meet deadlines and limited time to study. Musingafi et al (2015:65) state that late delivery of study materials can result in students submitting assignments that are not properly completed and may progress to examination season being inadequately prepared, resulting in poor performances. Musingafi et al (2015:65) further

mention that poor performance may not be their actual capabilities but reflections of the learning barrier. Another learning barrier which was faced by Par#5 was a financial obstacle to buy the prescribed textbook and is discussed in Section 4.2.3.1.

In short, the learning barriers faced by the participants were lack of learning support from the university, late delivery of study material, and ineffective learning because of financial barriers (unable to purchase a textbook). The next subtheme reviews the actions that were taken by the participants trying to eliminate such learning barriers.

b. Measures that were taken by the participants to remove the barriers

Information on measures that students took to overcome their learning barriers was important for this study to discover other approaches that can function for students studying through ODeL to achieve sustained learning. In doing so I intended to understand the different measures which students took attempting to overcome their learning barriers. The question below was asked during the interview,

What did you do to overcome those learning barriers?

Different methods and measures taken by different participants to mitigate the learning barriers could be observed. To overcome the barrier of lack of learning support from the university Par#1 employed self-discipline, he studied harder without help and passed the module. Par#2, 3,4, 5, and 6 could be seen to use the help of social media study groups, to receive the support that they required. These five participants stated that the social groups they had joined via WhatsApp and Facebook were of little help since no one on the group was knowledgeable to guide them about the module.

As stated by participant 6:

I joined the WhatsApp study group, but it was of little help because we did not have a lecturer to guide us.

Four of the study participants highlighted their inability to lessen the barriers of the complexity of MAT1503 learning content.

As asserted by Par# 2:

I can't say I overcame the barriers because I know I will not pass, and I haven't done well on the assignments. To begin with, I am helpless as it is because the exam was very difficult for me.

Par#5 expressed,

I did not overcome this problem because I was not successful in this module. I tried joining Facebook groups to interact with other students but that was not good enough.

Beside not overcoming the problem of lack of learning support, Par#5 also could not overcome the financial obstacle and could not purchase the prescribed textbook. Par#7 resorted to buying the prescribed textbook and downloaded the study materials to overcome the barrier of late delivery of study material. Par#7 stated,

I downloaded my study material from myUnisa and immediately purchased the prescribed book.

Par#7 raised an important point as it may denote that students who have access to the ICT infrastructure might find a difficult module such as MAT1503 manageable, contrary to those who have little and or no access to the Internet.

It can be observed that although two of the eight participants created some ways to overcome their learning barriers, it is evident from the interviews, that six participants truly required assistance from the university to cope with the module. The need for the university to discover methods to support learning is indicating to be a crucial aspect of students' success. This finding is also emphasised by Arko-Achemfuor (2017:658) who explains that student support should be one of the components in the ODL system to ensure endurance learning experiences and success. Viewpoints concerning the need for strategies or interventions and suggested approaches for continued learning in the South African ODeL settings are discussed in the subsequent theme.

4.2.3.4 Theme 4: Strategies or interventions for sustained Learning in South African ODeL

The use of interventions employing different strategies to support learning is necessary to help students towards the completion of their courses. This theme was developed from three questions of the interview inquiry, consequently, three different subthemes were developed under this theme. The first subtheme presented students' different perceptions considering the strategies/ interventions to support sustained learning. The second subtheme provided the recommended strategies according to students' opinions and the third theme recorded the efficacy of the suggested strategies to first-year ODeL students. The discussion of the subthemes was recorded as follows,

a. Students' perceptions regarding strategies/interventions to support sustained learning

Strategic intervention to support learning can be necessary for certain educational contexts to promote students' throughput. This subtheme was aimed at understanding whether the participants felt that there was a need for strategic intervention in the current ODeL frameworks at UNISA to support sustained learning. In response to that, all participants felt that there was a need for strategic intervention to promote students' retention.

The question asked was:

What do you think about strategies or interventions to support sustained learning in South African ODeL?

Par#1 said

I think it's a great idea especially if they help newcomers or first-year students to adapt to the concepts of ODeL.

The statement indicates that the strategic intervention to assist the newcomers to understand and familiarise themselves with the concept of ODeL would be helpful for them to perform better at UNISA. On the other hand, Par#2 and Par#3 mentioned that the strategic intervention aiming to assist learners will be helpful because the current system from the staff and management is not satisfactory in terms of efficient service delivery. SADC principle two and three encourage flexibility and learner centeredness in service delivery to react to the demands of students which are forever changing and creating a favourable environment for students (see Section 2.4). Par#2 and Par#3 perceive that the strategic intervention will help improve service delivery at UNISA. Correspondingly this notion is mention in Section 2.3 where it states that strategic intervention enables an organisation to prosper.

Par#2 said

I think the interventions will be helpful for students. I feel the UNISA staff and management are not doing enough to deliver efficient services to the students

Furthermore, Par# 3 stressed the importance of intervention in supporting learning as he felt

That will be of great help to students studying a difficult subject, such as Maths.

Par#4 thought that interventions and strategies are necessary because

They will assist students as they will enable many students to complete their studies.

Par#5,6,7 and 8 indicated that intervention is a very good idea that will help students to pass their examinations. Generally, the different perceptions of the students regarding the need for strategic intervention all mount to that it will help in initiating sustainable learning thereby helping in the successful completion of studies. Therefore, strategic intervention is necessary for distance education to better promote students' achievements. Ohene and Essuman (2014:156) also state that effectual DE settings always require strategic

planning to be applied. The next subtheme presents and explores participants' suggestions for effective strategic interventions.

b. Recommended strategies or interventions considered to implement at UNISA to support sustained learning

To successfully realise strategies, which can support sustained learning in ODeL students it was important to gather students' viewpoints regarding new strategies or interventions worth putting into effect at UNISA based on the gaps they encountered in their learning experiences. Regarding that participants had to answer the question:

Which strategies or interventions would you consider being implemented at UNISA to support sustained learning?

The great need for frequent face-to-face tutorials was indicated by most of the participants. Six participants indicated the need for frequent tutorials, and the reason according to Par#1 is

Because lots of students enrolling at UNISA are mostly recent high school leavers who are used to be taught by teachers. Thus, coming to an ODeL institution can be very challenging.

Par#2 and Par#4 were of the perception that the tutorial classes should be offered at all UNISA campuses where students are registered for the module. Additional to tutorial classes Par#3 thought instructors should record video tutorials because that helps students to learn better. Par#4 thought that UNISA should get more staff to teach Maths. Budiman (2013:9) mentions that instructors must acknowledge that new distance education students may be in isolation, therefore, instructors' support is crucial. Par#4 also stated that adapting to the strategy of frequent tutorials with instructors, can be helpful as English is not his home language but the medium of learning, so it is necessary for tutorials where there will be better learning opportunities for understanding difficult concepts and terminology.

Par#7 thought that tutorials must be arranged at the nearest campuses because:

Currently, they offer occasional video conferencing, but some students cannot afford enough data to be part of that teaching and learning technique.

The statement from Par#7 revealed that UNISA instructors offer occasional video conferencing to facilitate learning, however, this strategy may be difficult for students who live far from the video conferencing venues, or students may not afford data to be part of the virtual sessions from their devices. The issue of the lack of data is no longer a problem for UNISA students. Since September 2018 visiting myUnisa or the UNISA website does not require data anymore. The issue of lack of data could have affected students who were registered for the module in 2018 or still affecting those who are not aware of the data-free implementation.

Improved communication between the university and students and instructors and students was also significantly emphasised by the participants. Par#1, Par#2, Par#6, and Par#7 recommended improved communication from instructors to students and the university with the students.

Par#7 further stated:

Sometimes emails are not responded to in time. It will also be helpful if there are better responses in terms of the email system

and Par#2 said

UNISA must respond to the students' concerns on time.

Par#1 suggested a hotline for assisting students facing challenges and the provision of devoted staff to provide psychological support and reassurance to students when necessary. Likewise, Par#2 and Par#7 also felt that a hotline is needed to enable students to immediately access the required information. Par#6 advised that instructors of specific modules should also utilise SMS services as the university does to ensure faster and reliable communication with students than relying on emails only.

The need for initiatives from instructors on exploiting various teaching techniques to reduce the complexity of the learning content to students was advised by four participants. Par#6 suggested that there should be an adoption of mixed teaching methods for e-Learning, contact, or DVD. On this token, other participants requested various methods to make studying easier.

Par#2 responded that UNISA should

...offer DVDs that explain in depth the subject or module.

Additionally, Par#3 expressed,

Lectures must try to do video conferencing classes.

The institution can ask the lecturers to record videos facilitating lessons and include them in the study materials”

According to Par#8, the presence of more questions and several resolved solutions for practice will help in better conceptualisation of the subject. Par#2, Par# 3, and Par#8 stated that an important strategy that will assist students would be to offer tutorials at all campuses or provide DVDs with an in-depth explanation of the learning content enclosed with the study material. Par#8 statement suggested the strategy in which instructors become available to offer tutorials or offering tutorials on videos, can enhance easy understanding. Budiman (2013:9) advises that instructors must be creative in delivering learning content tutorials.

Furthermore, Par# 8 recommended that if weekend tutorial classes are unavailable or cannot be facilitated through video conferencing techniques and DVDs would be beneficial. Par#8 was of opinion that the strategy of providing DVDs can ease understanding of the learning content because it can be played repeatedly. Par#8 also suggested uploading video podcasts that students can download and store on their devices can enable them to watch the videos again and again. Kay (2012:823-825) mentions video podcasts were found to impact positively on academic performance.

Delays in the delivery of study material also indicated to be an issue that deserved consideration.

Par#2 stated

Send the study material on time rather than late.

Par# 2 and Par#7 felt that there is a need for UNISA to collaborate with the courier or logistics company so that learning materials can be delivered to students in time because some students do not have opportunities for downloading and storing the study materials from the UNISA website.

Par#5 revealed another important strategy of frequent student enquiry.

Par#5 said,

I think the university should do ongoing enquires with students to identify what's working or not working in their studies.

Par#5 felt that UNISA should conduct a continuous student inquiry strategy to discover students' challenges such as including compulsory questionnaires in tutorial letters. Par#5 suggested that students' enquiry strategy will assist the university committee to identify students' problems. Surveying the needs of the students is beneficial to any ODeL institution attempting to discover the needs of the students and plan effective assistance. Ohene and Essuman (2014:156) state that the planning can be done competently if challenges experienced by students are known.

A valuable strategy that was brought up during the interviews was the importance of developing open educational resources (OERs). Par#5 felt that there is a growing need for the university to start developing OERs for assisting less privileged students who cannot afford to buy textbooks to avoid unnecessary dropouts from UNISA. The notion of developing and using OERs is also encouraged in the South African 2014 Higher Education Act (see Section 2.2). Additionally, Hilton (2016:588) reveals that the findings

of sixteen studies proved that OERs benefit students financially while providing equal benefits with commercial textbooks.

The provision of financial aid to all needy students must be introduced at the university. Par#5 believed that having financial aid accessible to all needy students will ensure no student is left behind due to financial constraints. I am aware of funding schemes such as the National Student Financial Aid Scheme (NSFAS) however, there are some requirements for qualifying and some students do not qualify for the funding.

Seven strategies/interventions necessary for UNISA ODeL operations emerged from the data as advised by the participants. These strategies are frequent face-to-face tutorials, better communication, fast delivery of study materials, exploitation of various teaching techniques, frequent student enquiry, development of OERs, and provision of financial aid. The usefulness of these suggested strategies to better the learning experiences of students studying first-year modules as perceived by the participants are examined in the next subtheme

c. *The efficacy of the recommended strategies /interventions to ODeL students*

Whenever interventions are intended to better situations, the usefulness of such interventions to be implemented must be explored. Generally, this should be done to ensure that these interventions will better the situation. Therefore, the effectiveness of the strategies that were assumed to be implemented within UNISA needed to be scrutinised for enhancing sustainable learning. Under this research subtheme, the efficiency of the advocated interventions by the participants listed in the previous subtheme was examined through consulting the reasons from the participants. The question posed to the participants to collect data was:

To what extent do you consider those strategies being helpful to ODeL students, particularly to first-year students? Explain briefly.

On that note, the efficacy of the strategy of the provision of campus tutorials which was recommended by six participants is that it enhances a better understanding of the learning

content because there is instructor-student interaction, hence questions can be asked and answered. Par#1 clarified that the reason for this is that many students enrolling at UNISA are mostly recent high school leavers who were taught by teachers, thus coming to an ODeL institution can be very challenging. Par#2 Par#3, Par#4, Par#7, and Par#8 felt that frequent tutorials will assist students to better understand the module and difficult concepts. The provision of tutorials is noted as a major strategy suggested by most participants since they assume tutorials will enhance a better understanding of the learning matter.

The effectiveness of exploiting various teaching techniques such as DVDs with an in-depth explanation of the learning content, video conferencing, simplified notes, and worked examples was another major strategy suggested by four participants that could make the learning process manageable. They believed that DVDs would be helpful because students can watch the instructors facilitating the lessons. Interestingly, Hanover's research (2011:16) also mentions that DVDs can be used by lecturers to deliver lectures, demonstrations, and presentations.

Student enquiry was another important suggestion by one participant, Par#5 said

That strategy will be helpful especially to the first-time ODeL as the students will be able to submit their concerns during their first year of learning. If the university does survey each semester to understand student problems many changes can be brought about in ODeL.

The statement expressed that UNISA needs to conduct surveys and collecting their students' perceptions so that they could know students' problems. Par#5 trusts that if UNISA conducts frequent surveys to identify challenges faced by students, it can continuously attend to the challenges, therefore, convey positive learning experiences to students.

Improved communication of students with instructors and the university was also raised. Par#2 and Par#7 perceived that an improved communication strategy is important for students' guidance thus better the learning experiences and students' grades. Uribe and Vaughan (2017:288) advise that feedback is a fundamental teaching habit because it helps support learning and creates a connection among the instructors and students even

though there is no face-to-face interaction. On the same suggested strategy, Par#4 proposed that UNISA should hire additional staff to teach difficult subjects like mathematics, that ensures that more staff is available to assist students. Par#1 and Par#6 believed that better communication strategies will assist students to get counselling or forward their queries and get immediate responses.

Another valuable strategy submitted by Par#2 and raised by Par#7, is the timeous delivery of study materials. According to Par#2, if study materials are delivered in time, students can have more time to work on the learning content and prepare for exams, hence yield better results. Par#7 anticipated that fast delivery of study materials is still important in ODeL because many students have only cell phones as their only ICT device, which are not compatible with storing and reading the learning content, thus fast delivery of study material can enable them to have adequate time to study.

Financial aid and development OERs can bring positive consequences to both the institution and the students. As mentioned by Par#5, these two strategies can assist potential students to complete qualifications and improve the institution's students' throughput and retention. The next section presents a summary of the findings.

4.3 SUMMARY OF FINDINGS

Table 4.3 summarises the findings recorded in each theme and subtheme.

Theme	Subthemes	Findings
Experience of the student	Learning experience If registered as a first-year ODeL student.	All five first-year participants said their learning was not easy due to the lack of support from the university. Additionally, one did not afford to buy the prescribed textbook too. However, one participant managed to adapt to the concept of DE and studying in isolation and studied harder consequently, he passed the module.
	Learning experience registered not as a first-year ODeL student.	Three participants had differing experiences, two still found the learning experiences extremely difficult while one found the learning experience easier because he had been studying through distance learning for a while and had adapted.

Impact of the learning experience	Impact of the learning experiences on the module results.	Six of the eight participants failed the module on first registration and believed if the university was supportive, their results on the module would have been favourable. However, two participants managed to cope without the support from the university, one said he had adapted to the concept of distance education and the other simply studied harder and maintained self-discipline.
Barriers in the Learning experience	Barriers encountered in the Learning experience	All eight participants experienced some sort of learning barriers. Among the eight, six felt that the learning content was very difficult, that they could not cope and they were confident that if their instructors had been communicative or had used some methods to make the module easier for students, they would have done better. In addition to the complexity of the module, one participant did not have Internet access to communicate with instructors or to go to myUnisa and another participant did not have money to buy the prescribed textbook.
	Measures that were taken by the participants to remove the barriers	All eight participants joined WhatsApp and Facebook study groups to discuss with other students. Also, one participant downloaded study materials from myUnisa and immediately bought the textbook.
Identifying strategies or interventions for sustained learning in South African ODeL	Students perception regarding strategies /interventions to support sustained learning	All participants' viewpoints indicated that there is a need for strategic intervention at UNISA.
	Recommended strategies or interventions considered to be implemented at UNISA to support sustained learning.	All eight participants provided constructive recommendations that UNISA can employ as strategies to promote sustained learning. Six participants expressed the need for frequent face-to-face tutorials. Three participants advised on the development of a hotline. One participant recommends the provision of psychological help that will help students in need. Two participants requested lessons recorded on DVDs.

		<p>Three participants recommend improved communication from instructors to their students.</p> <p>Two participants advised on ensuring that study materials are dispatched and delivered without delays.</p> <p>Two participants recommend video conferencing.</p> <p>One participant suggests frequent student enquiry.</p> <p>One participant put forward the development of OERs.</p> <p>One participant advises that instructors for specific modules should also utilise SMS services like the university to ensure communication than only emails.</p> <p>One participant suggests the provision of financial aid to all needy students.</p>
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	<p>The efficacy of the recommended strategies /interventions to ODeL first-year students.</p>	<p>Frequent tutorials enhance a better understanding of the learning content due to instructor-student interaction.</p> <p>DVDs or video podcasts with an in-depth explanation of the learning content can be helpful because students can watch the instructors facilitating the lessons. Students can also watch them several times.</p> <p>Frequent surveys to identify challenges faced by students can assist institutions to address the challenges, therefore bring positive learning experiences to students.</p> <p>Improved communication with the instructors guide students, thus improving learning experiences and students' grades.</p> <p>Fast delivery of study materials enables students to have enough time to study and prepare for exams hence yield better throughput from students</p> <p>A hotline to attend to students, assist students to forward their queries, and get immediate responses.</p> <p>The development of OERs assists with learning content for students unable to purchase textbooks.</p> <p>Video conferencing permits virtual interactions with questions and answers.</p> <p>Incorporating SMS for communication enable continuous communication with students who sometimes lack Internet connectivity to retrieve emails.</p> <p>A department dedicated to assisting first-year students psychologically. To counsel and encourage stressed first-year students.</p>
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4.4 CONCLUSION

Distance learning has reduced the geographical space between the instructors and the students, but certain challenges are resulting in poor performance among students. This concerned research related to the quality of learning by exploring different procedures and techniques that would help in reducing the dropouts through students' reflections.

Regarding that problem, which was the aim of this study, this chapter provided the findings of the interviews conducted on eight student participants to explore and answer the research question. To do so, it first described the background of the study participants. The second step was the presentation of the themes and subthemes that emerged from the examination of the data using the thematic analysis technique. Theme discussion was the third step of this chapter where themes were related to the data provided by the participants and confirmed by referencing the viewpoints of other writers from the literature review, policies that guide DE operations and published literature. Finally, it was the presentation of the summary of the findings which outlined the data related to each broad theme and its subtheme/s. The analysis of data completed in this chapter provides the guidelines for the next chapter, which presents the summary, recommendation, and conclusion of the study.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 INTRODUCTION

The previous chapter discussed the findings of the empirical study. The analysis of data led to the description of the findings. This chapter presents an overview of the entire research and provides a logical conclusion. All chapters that were completed in this research report are briefly discussed in this chapter. It discusses the literature review of the research, a summary of the empirical study, and the synthesis of the outcomes through which the findings of the empirical study are compared to the literature review. Further, based on the findings of this research, this chapter provides the answers to the research questions. Furthermore, the limitations of this research along with its loopholes are also discussed. The limitation section of this research paper is regarded as extremely important since it would benefit for conducting future research. Likewise, this chapter provides meaningful future scope along with recommendations through which ODeL in South Africa could consider for achieving sustainable learning.

5.2 SUMMARY OF THE LITERATURE

The literature review presented in Chapter 2 provides a base through which different factors that affect sustained learning in South African and internationally ODeL were explored. The first section (Section 2.2) of the literature review discussed the role of ODeL in providing access to higher education within South Africa. The history and ICT development in DE both locally and internationally were also discussed. This section also highlighted challenges faced by South African ODeL to produce better students' throughput and retention. The rationale of strategic intervention in an organisation which is the key concept of this study was discussed next in Section 2.3. Chapter 2 (Section 2.4) mentioned the different organisations involved in the policymaking of South African ODeL such as the Council on Higher Education (CHE), the National Association of Distance Education and Open Learning in South Africa (NADEOSA), Department of Higher

Education (DHET), Higher Education Quality Committee (HEQC) Southern African Development Community (SADC), and South African Qualifications Authority (SAQA) as well as their various operations towards the development of the distance learning system. Furthermore, Chapter 2 (Section 2.5) discussed previous research regarding issues and challenges faced by distance students where six articles of investigations conducted in South Africa and internationally, related to challenges faced in DE were reviewed. Section 2.6 presented the three theories that supported the process of this concerned research. Characteristics, relevance, and the justification of using these theories namely: symbolic interactionism, post-colonial research theory, and ubuntu philosophy in this concerned research are thoroughly elucidated. The summary of the empirical study is summarised in the next section.

5.3 SUMMARY OF EMPIRICAL STUDY

Chapter 3 focused on the justification of the research methodology where the research design and research methods were presented and discussed. To discover answers to the research questions, the empirical research design employed an interpretivism paradigm supported by a qualitative approach and case study (see Section 3.3). Consequently, data was collected qualitatively where UNISA MAT1503 students were the case used for the investigation. The selected participants were eight students who took part in providing the intended information (provided in Section 3.4.1).

Data collection was achieved using semi-structured interviews to gather extensive data through probing. Face-to-face, telephonic, and online interviews were utilised (see Section 3.4.2). Data analysis was described in Section 3.5 where I clarified how data were analysed inductively using the thematic analysis technique which led to the establishment of themes

Trustworthiness principles namely credibility, dependability, confirmability, and transferability were presented and discussed in Section 3.6. Under trustworthiness, the validity, reliability, and applicability of this study on future investigations in similar contexts were elucidated. Additionally, the application of ethical considerations in this study was mentioned in Section 3.7 where I described how I adhered to the rules for conducting empirical research with human subjects. I also explained how I gained the ethical

clearance certificate and permission to involve UNISA students in data collection from the institution.

Chapter 4 provided the research findings. It discussed the findings under each theme and sub-theme/s that were categorised during data analysis. (see Section 4.2). The first theme focused on the learning experience of the students. This theme explored the experiences under two subthemes, where two types of students registered for this first-year module, those who had never been registered in ODeL, and those who had registered in ODeL before were asked to interpret their learning experiences (see Section 4.2.3.1). The findings confirmed that the learning experiences of seven participants were not learner-friendly because the support from the university was disappointing. The second theme examined the impact of the learning experience where the subtheme focused on associating the impact of the learning experiences to the results of the module (see Section 4.2.3.2). Six participants indicated that the unpleasant learning impacted negatively on the results of the module while two participants who passed the module said that their learning experiences impacted positively on the results of the module in question.

The third theme analysed barriers in the students' learning experience where two subthemes concentrated on determining the specific barriers encountered by students during the learning experiences and the measures, they took attempting to overcome such barriers. (see Section 4.2.3.3). Responses from the participants disclosed that students experienced various learning barriers such as the complexity of the module, lack of support in the learning process from instructors and the university, lack of funds to buy the prescribed textbook, lack of ICT ownership, and connectivity and late delivery of study materials.

The final theme focused on the strategies or interventions for sustained learning at UNISA. The three subthemes for this theme needed to understand whether the participants felt that UNISA ODeL needed strategic intervention to promote sustained learning. If so, what strategies or interventions do they recommend, and what is the efficacy of those recommended strategies? All participants signalled the need for strategic intervention at UNISA. Seven suggested strategies by the participants are presented in (Section 4.2.3.4b). The usefulness of the suggested approaches for supporting continuous learning

was recognised useful by the participants associating the strategies to the gaps they experienced when studying MAT1503. The justifications and clarifications to the efficacy of the strategies are in line with the participants' viewpoints (see Section 4.2.3.4c). The next section will discuss the synthesis of research findings.

5.4 SYNTHESIS OF THE RESEARCH FINDINGS

In the preceding section, the focus was on the research methodology, data analysis, and interpretation. This section examines the similarities and contradictions between the literature review and the findings of the empirical study. Three similarities were identified namely, challenging learning experiences, lack of initiatives among the instructors, and low throughput in DE.

The first similarity identified is, challenging learning experiences. Six participants in this empirical study, both first-year and non-first year in ODeL confirmed that the learning experiences were challenging, facing various threats hindering their success. This challenge was also reported in research articles by Ohene and Eussaman (2014:163-169) and Musingafi et al (2015:62-65) cited in Chapter 2 (Section 2.5), where students experienced financial constraints, lack of ICT ownership and connectivity, delayed study materials, unsatisfactory communication, and lack of academic support from instructors and institutions.

The second similarity was the lack of inventiveness among the instructors to promote successful learning among students, see (Section 2.5). Investigations conducted by Arinto in 2016 and Nyoni in 2014 disclosed that many instructors lack the abilities and the determination to exploit modern technologies to support their students' learning. In this empirical research, the findings revealed that students urgently need learning support from their instructors. Six participants expressed the need for frequent face-to-face tutorials, two participants suggested lessons recorded on DVDs, and two participants recommended video conferencing. As stated by students, currently, not much support is provided by their instructors. One participant mentioned that video conferencing was provided close to exam time.

The third similarity is of low throughput in DE. As reported in DHET, the throughput in DE is disappointing (see Section 2.2). Low throughput was also discovered in this empirical study where six of eight participants failed the module on the first attempt. The next section discusses the conclusion drawn from the findings connecting to the research question.

5.5 CONCLUSIONS CONCERNING THE RESEARCH QUESTIONS

This study using UNISA MAT1503 as a case aimed to discover the strategies that can be explored in South African ODeL to possibly achieve sustainable learning especially for students in the foundation years of studying through ODeL. To identify such strategies the main research question and three sub-questions were stated in Chapter 1 (Section 1.5) and the discussions concerning the findings are provided in the subsequent section.

Main research question: What are the strategies for supporting sustained learning in Open Distance and eLearning in the South African context?

The findings of this empirical research based on the perceptions of eight ODeL foundation years students at UNISA revealed that strategies for supporting sustained learning in South African ODeL require ODeL institutions to do surveys often to identify students' challenges. It was justified that such surveys can enlighten the stakeholders and therefore they can seek solutions to the challenges. It was also clear from the findings of the study that improved communication for students and instructors, and students and their institutions are essential for students' success hence improved communication is another valuable strategy to embrace in South African ODeLs. Other important strategies suggested by the participants are the development of OERs, comprehensive financial aid for all students as it is felt that some successful potential students are disadvantaged by their socio-economic status. Additionally, learner support and instructor's initiative for successfully delivering the learning content were other important strategies emphasised. Lastly, fast delivery of learning materials is also an essential strategy that was advised by students because some students were still relying on printed form of learning materials because they did not have the technological devices for accessing and storing the learning matter.

Sub-question 1: What are the viewpoints of students about their learning experiences while studying first-year modules?

The findings of this study indicate that all participants faced different problems regarding ODeL at UNISA. Only two out of the eight participants managed to pass the module. In the interviews, many of the participants noted the absence of satisfactory communication with the instructors to get the desired learning support they needed. Furthermore, one participant stated that the study material lacked the crucial notes to make the learning notes easy to understand (for example provide enough worked examples) which resulted in perceiving that the exam content was not fully covered in the study material. Most of the participants also expressed that the instructors did not use initiatives to assist students to pass the module. Also, two students mentioned the problems of delays in the delivery of study material. Considerably one student raised a vital negative learning experience of having to study the module without the prescribed textbook, this was because he did not have money to purchase the textbook.

Sub-question 2: How do the opinions of students influence their motivation to continue studying?

From the findings, it can be concluded that unpleasant learning experiences did not demotivate all students wishing to acquire higher education qualifications. Two participants managed to pass the module; one was a first-year student in ODeL who motivated himself because he accepted that his success depended on him. The other participant who passed the module had been studying through ODeL for a while, completing the higher certificate, he believes that the experience of studying through ODeL trained him to cope with related challenges. Four participants were seen to have failed the module, but they reregistered for the module hoping to pass it. However, two students were demotivated by the negative learning experiences and one participant discontinued UNISA studies, while the other one relinquished the qualification to avoid the module and registered for another qualification that did not include MAT1503.

Sub-question 3: What strategies did students suggest for a positive learning experience?

The findings unveiled different strategies that the participants perceive can promote sustained learning among ODeL students in the foundation years. Important strategies realised are frequent students' enquiry, proper communication between students and instructors as well as the university, the introduction of a hotline, offering frequent face-to-face tutorials, development of OERs, provide financial support, initiating different ways to deliver education to cater to diverse learning needs of students, and developing a department dedicated to assisting students psychologically.

Therefore, stakeholders of ODeL institutions can consider incorporating strategies that involve surveying students' needs and challenges frequently in their management processes. Further, communication would enhance a better understanding of the learning content when students and instructors communicate and explaining difficult concepts in simple terminology especially to those whose English is not their native language. Consequently, it was found to be highly desirable, if communication between the students and instructors, and students and institutions could be improved. Also, this study identified that a student opted to drop out due to his poor financial condition and inability to purchase a textbook, thus, the institutions need to identify such students and provide them with necessary financial support. The development of OERs can immensely ease the financial challenges that come with textbook costs. Although the research findings excellently answered the main research question and sub-questions, the research, in general, had limitations. The subsequent section highlights the limitations

5.6 LIMITATIONS

This study is of mini-dissertation scope, although it was carefully planned and conducted following the needed processes and procedures it has certain limitations. The limitation of the study was the number of selected participants, only eight students participated in the interviews. The findings might have been different if data were collected from more participants. However, the purpose of this research of mini-dissertation scope was to get in-depth data from students studying in the foundation years of ODeL and should act as the basis for further research.

5.7 RECOMMENDATIONS

Based on the findings of the interviews, this investigation makes recommendations as some of the strategies that can support sustained learning to South African ODeL students according to the viewpoints of the students. These recommendations embrace the attributes of the theories that underpinned this study namely: symbolic interactionism that addresses opinions that society places on phenomena and behaviours, Ubuntu that encourages solidarity in communities, and postcolonial indigenous ethical theories that support social justice in society. All these theories are grounded on the aim of building a society that is socially constructed.

5.7.1 Recommendations to management at the ODeL institution

- The development of a hotline to assist students. This approach will assist students to forward their enquires and get instant feedback, or the consultant will forward the query to the necessary department. The approach is most valuable to first-year students who may be unaware of certain services offered by their ODeL institutions. Furthermore, a hotline can serve the purpose of providing extensive information regarding the services and departments of the institutions before transferring the caller to the consultant, that way many students can obtain the information they require even before talking to a consultant.
- Conduct student surveys frequently. Frequent surveying of the limitations of the course content or challenges faced by students and seeking suggestions for improvements is extremely informative and valuable to any institution aiming to achieve sustained learning. The surveys will inform the curriculum developers, lecturers, and the institutions on areas to improve in the learning content, recommendations in the teaching and learning processes, and financial aid required by disadvantaged students.
- Ensure fast delivery of study materials. Fast delivery of study material assists students to orient themselves with the learning material before attempting assignments. This will result in carefully completed assignments and students will be well prepared for the exams. Therefore, ODeL needs to prioritise quick

dispatch of study materials and partner with reliable and efficient courier companies for early delivery of study materials to students, especially those living in rural areas. Students living in remote areas mostly face problems with internet connectivity so learning materials in hardcopy form is still essential to them.

- Consider the development of OERs. OERs come in handy for students facing financial barriers. Abramovich and McBride (2018:33) mention that community colleges and other public-funded state colleges are using OERs to lessen or remove and eliminate the expenses of purchasing course materials since OERs are freely available.
- Establish ways to assist needy students from facing financial barriers. The management can formulate ways to identify students who are in real need of financial assistance to avoid potential students from dropping out.

5.7.2 Recommendations to ODeL instructors

- Instructors must be inventive in service delivery. Instructors can discuss with their students in the first week of the semester of preferred learning methods to best assist them in the learning process. This can be achieved by inviting all students to the module discussion forum on the institutions' website or even on a WhatsApp group where everyone will be active and can provide suggestions. Together they can then agree on the best and most effective way that students assume will assist them to pass the module.
- Instructors should try to provide immediate responses to students. Instructors can therefore ensure immediate feedback to students instead of leaving them anxious and waiting.

5.7.3 Recommendations to ODeL students

- Students should motivate themselves towards the success of their studies
- Students should start by enrolling in short courses to orient themselves to distance education. Enrolling in short courses can give them opportunities to

discover their aptitudes in ODeL and possibly train themselves to adapt to the reality of learning through ODeL.

- Students should familiarise themselves with what ODeL entails before enrolling. They can visit the UNISA website which provides such information.

5.8 SUGGESTION FOR FURTHER RESEARCH

This study is a dissertation of limited scope that was conducted at one ODeL university to eight students from one module. It is recommended that further research on strategies to support sustained learning in South Africa should be conducted at different universities and in different areas of South Africa using a different research approach. Thus, such strategies can be discovered throughout South Africa. Further research will reinforce the findings of this study and assist in the implementation of the recommended strategies. Further research can also include viewpoints of UNISA staff since they are involved in the teaching and learning process. An investigation collecting both instructors' and students' perceptions will provide different insights of both students and instructors on strategies that can support sustained learning.

5.9 CONCLUSION

Recently, ODeL has become a big contributor in offering access to higher education in South Africa. Although easy access is made possible for almost everyone willing to acquire higher education, completing the qualifications appears to be extremely challenging for many students. Repeatedly the annual graduation rate over the years has been very low. Despite the effort made by institutions such as providing ICT infrastructure and access to the Internet, the graduation rate remains low.

This study aimed to discover students' perceptions regarding strategies that can support sustained learning in South African circumstances. The study focused on eight students registered for a first-level module at UNISA. A case study design was exploited where data was collected using face-to-face, telephonic, and online interviews. Data collection was conducted in the participants' natural settings, to improve the credibility of the research findings.

I outlined what was realised from the themes and sub-themes that emerged from the data analysis which assisted in interpreting the findings and consequently concluding. The findings established that ODeL students at UNISA face various challenges that hinder their achievements. Basing on the findings, the most confirmed challenge is that UNISA did not offer students satisfactory learning support which negatively impacted the module results for most participants. The findings further indicated other challenges faced by students where late delivery of study materials, lack of finances to purchase additional learning resources, and barriers to ICT and internet connectivity.

The study noted that the success of ODeL depends on sound student support. Additionally, the study confirmed the urgent need for strategic intervention in the current ODeL framework at UNISA to address challenges faced by students and to improve the quality of education delivery.

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APPENDIX A; ETHICAL CLEARANCE CERTIFICATE



UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2019/02/13

Dear Mrs Tafirenika

Decision: Ethics Approval from
2019/02/13 to 2022/12/13

Ref: **2019/02/13/47618426/19/MC**

Name: Mrs N Tafirenika

Student: 47618426

Researcher(s): Name: Mrs N Tafirenika
E-mail address: 47618426@mylife.unisa.ac.za
Telephone: +27 84 923 2750

Supervisor(s): Name: Prof G Van Den Berg
E-mail address: vdberg@unisa.ac.za
Telephone: +27 12 429 4895

Title of research:

**Strategies to support sustained learning in Open Distance and e-Learning in a
South African Context**

Qualification: M. Ed in Curriculum and Instructional studies

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2019/02/13 to 2022/02/13.

*The **low risk** application was reviewed by the Ethics Review Committee on 2019/02/13 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the UNISA College of Education Ethics Review Committee.



University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after the expiry date **2022/02/13**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

*The reference number **2019/02/13/47618426/19/MC** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Kind regards,

Prof AT Motlhabane
CHAIRPERSON: CEDU RERC
 motlhat@unisa.ac.za

Prof F V McKay
EXECUTIVE DEAN
 Mckayvi@unisa.ac.za

Approved on

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University of South Africa
 Preller Street, Muckleneuk Ridge, City of Tshwane
 PO Box 392 UNISA 0003 South Africa
 Telephone +27 12 429 3111 Facsimile. +27 12 429 4150
 www.unisa.ac.za

**APPENDIX B: RESEARCH PERMISSION SUB-COMMITTEE (RPSC) OF THE
SENATE RESEARCH, INNOVATION, POSTGRADUATE DEGREES AND
COMMERCIALISATION COMMITTEE (SRIPCC)**

2 May 2019

Decision: Research Permission Approval from 2 May 2019 until 30 November 2019.

Principal Investigator: Ms. Nancy Tafirenyika Curriculum and Instructional studies
School of Teacher Education College of Education 47618426@mylife.unisa.ac.za; 084
271 0037, 084 923 2750

Supervisor: Prof G. Van Den Berg; vdberg@unisa.ac.za. 012 429-4895 Strategies to support
sustained learning in Open Distance and e-Learning in a South African Context

Your application regarding permission to conduct research involving UNISA employees, students
and data in respect of the above study has been received and was considered by the Research
Permission Subcommittee (RPSC) of the UNISA Senate, Research, Innovation,

Postgraduate Degrees and Commercialisation Committee (SRIPCC) on 18 April 2019.

It is my pleasure to inform you that permission has been granted for your study. You may:

1. Gain access to the following information ONLY through the gatekeeping assistance of the
supervisor for Phase 1 of the study: • Mylife email addresses of the students registered for the
MAT1503 in 2018 and 2019. • Personal email addresses of the students who failed the module
in 2018 and did not re-register in 2019.

Ref #: 2019_RPSC_022 Ms. Nancy Tafirenyika Student #: 47618426 Staff #: N/A

2. Contact the students to request their voluntary consent to participate in face-to-face interviews
and you may conduct interviews with 15 students registered for the module. 3. After the completion
of the interviews (Phase 2), you may send an online survey through the gatekeeping assistance
of ICT to the students registered for the MAT1503 and COS1501 modules in 2018, excluding the
students who participated in the first phase of the study.

You are requested to submit a report of the study to the Research Permission Subcommittee (RPSC@unisa.ac.za) within 3 months of completion of the study.

The personal information made available to I(s)/gatekeeper(s) will only be used for the advancement of this research project as indicated and for the purpose as described in this permission letter. I(s)/gatekeeper(s) must take all appropriate precautionary measures to protect the personal information given to him/her/them in good faith and it must not be passed on to third parties. The dissemination of research instruments through the use of electronic mail should strictly be through blind copying, so as to protect the participants' right of privacy. I hereby indemnify UNISA from any claim or action arising from or due to I's breach of his/her information protection obligations.

Note: The reference number 2019_RPSC_022 should be clearly indicated on all forms of communication with the intended research participants and the Research Permission

Subcommittee.

We would like to wish you well in your research undertaking.

Kind regards,

pp. Dr Retha Visagie –

Deputy Chairperson: RPSC Email: visagrg@unisa.ac.za, Tel: (012) 429-2478 _

Prof L. Labuschagne – Chairperson: RPSC Email: llabus@unisa.ac.za, Tel: (012) 429-6368

APPENDIX C: PARTICIPANT INFORMATION SHEET

Date: 01 May 2019

Title: Strategies to support sustained learning in Open Distance and e-Learning in a South African context

DEAR PROSPECTIVE PARTICIPANT

My name is Nancy Tafirenyika and I am doing research under the supervision of Prof G Van Den Berg, a professor in the Department of curriculum and instructional studies towards a Master of Education in Open and Distance Learning at the University of South Africa. We are inviting you to participate in a study entitled, Strategies to support sustained learning in Open Distance and eLearning in a South African context.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that can enable me to discover the procedures and best practices to reduce dropouts while promoting sustained learning and student retention particularly the first-year students in open distance learning. Thus, provide the stakeholders with enlightenment and recommendations concerning strategies that can support sustained learning among ODeL students in South Africa.

WHY AM I BEING INVITED TO PARTICIPATE?

You are invited because you were studying a first-year module in 2018, therefore, this research aims to get your viewpoints concerning your learning experiences while studying the first-year module in ODeL. I obtained your contact details from the University of South Africa. I obtained permission to contact you from the University of South Africa after I obtained an Ethical clearance certificate from the College of Education Ethics Research Committee to conduct the research. The approximate number of participants is fifteen. Fifteen students will be selected from three subgroups namely, students who passed MAT1503 in 2018 or 2019, students who failed MAT1503 in 2018, and reregistered in 2019, and those who failed MAT1503 in 2018 but did not register for it again. I believe that this group of selected participants will address the maximum variability of participants concerning first-year experiences of studying through ODeL. In doing so I may identify

factors which either enhance or inhibit the successful completion of courses in South African ODeL.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves standardized open-ended interviews. The interview protocol consists of ten open-ended questions. The content of the protocol questions is guided by the research problem of high dropouts faced among first-year ODeL students in South Africa. The questions focus on the possible causes of high dropouts and what can be done to promote sustained learning. The allocated time is thirty minutes, however, the duration will depend on how quickly your responses will be.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

Participating in this research assist the first-year students to voice out their concerns regarding best practices for students' success and retention in South African ODeL. Your participation may help me discover the underlying problems leading to high dropouts among first-year students in South African ODeL. Identifying these problems will assist the stakeholders to formulate strategies to support sustained learning in the South African ODeL.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

If you choose to participate in this investigation you may feel an emotional discomfort revealing the experiences that led to your outcome of the module in the discussion. If at any point you start feeling that emotional discomfort, please notify me so we stop the and schedule for another future interview if you still want to participate but if you opt not to participate we will terminate the interview.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from me and identified members of the research team, will know about your involvement in this research. Your name will not be recorded anywhere, and no one will be able to connect you to the answers you give. Your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you permit for other people to see the records. This investigation may be published but its participants will not be identifiable in the publication.

HOW WILL THE RESEARCHER (S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be scanned and stored on compact discs and online survey data will also be stored on the compact discs and deleted from the hard drive of the computer after the submission of the dissertation. The Discs will be stored by the researcher for a period of five years in a locked cupboard at researcher's house for future research or academic purposes; electronic information will be stored on a password protected the computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Indicate how the information will be destroyed if necessary. After then the compact discs will be permanently destroyed.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There will be no payment for participating in this research, however, I will reimburse travelling costs incurred by participants to come to the interview.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the College of Education at Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Nancy Tafirenyika on 0849232750/0842710037 or email on nancytafirenyika@ymail.com or nancymaheya@gmail.com. The findings are accessible for three months after the final submission of the dissertation; therefore, you can contact me between 30 October 2020 and 30 January 2021.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Nancy Tafirenyika on 0849232750 / 0842710037 or email on nancytafirenyika@ymail.com or nancymaheya@gmail.com.

Should you have concerns about how the research has been conducted, you may contact the researcher's supervisor Prof G Van Den Berg on 0124294895 or vdberg@unisa.ac.za

Thank you for taking the time to read this information sheet and for participating in this study.

Yours faithfully

Nancy Tafirenyika

APPENDIX D: INTERVIEW QUESTIONS

1. Briefly describe yourself.
2. Are you currently registered for 2019 academic year studies at Unisa? Give reasons for the answer.
3. Is/was your registration for MAT1503 in 2018/ 2019 your first enrolment in ODeL?
4. If you answered yes to question 3, describe your learning experiences in 2018/2019 as a first-year student in ODeL?
5. If you answered no for question 3 describe your experiences with the module in question.
6. Did your learning experience of the module have an impact on the outcome of your studies?
7. Did you encounter any barriers, for example, lack of support or lack of technical assistance, etc?
8. How did you overcome those barriers?
9. What do you think about strategies or interventions to support sustained learning in South African ODeL?
10. Which strategies or interventions would you consider being implemented at Unisa to support sustained learning?
11. To what extent do you consider those strategies being helpful to ODeL students, particularly first-year students? Explain briefly.

APPENDIX E: CONSENT TO PARTICIPATE IN THIS STUDY (Return slip)

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits, and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications, and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the structured interviews.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname (please print) _____

Participant Signature Date

Researcher's Name & Surname (please print)

Researcher's signature

Date

APPENDIX F: PARTICIPANTS INTERVIEW TRANSCRIPTS

PAR#1- Passed on first registration in 2018

1. Briefly describe yourself.
I am aged 21 currently enrolled for BSC in Computer Science. I stay with my aunt and four siblings in
2. Are you currently registered for 2019 academic year studies at Unisa? Give reasons for the answer.
Yes, I am registered for the second year in the stream of computer science. I am registered because I was accepted to register for this academic year ie, I reached the points needed by Unisa to continue with my studies.
3. Was your registration for MAT1503 in 2018/ 2019 your first enrolment in ODeL?
Yes.
4. If you answered yes to question 3, describe your learning experiences in 2018 as a first-year student in ODeL?
At first, it was hard, having the pressure to keep up with studying at a distance without tutors. However, I developed strong self-discipline in that getting through my studies depended mainly on me.
5. If you answered no for question 3 describe your experiences with the module in question.
6. Did your learning experience of the module have an impact on the outcome of your studies?
No, the bad learning experience did not impact my studies, I passed the module. I can't possibly say it had an impact on my results instead it helped me in other modules that needed one to understand some concepts in MAT1503, so it led to less studying for me.
7. Did you encounter any barriers, for example, lack of support or lack of technical assistance, etc?
Yes, at first, I had lots of barriers but the major one was that I had no learning support.
8. What did you overcome those learning barriers?
Nothing else helped me to overcome these barriers except self-discipline.

9. What do you think about strategies or interventions to support sustained learning in South African ODeL?

I think it's a great idea especially if they help newcomers or first-year students to adapt to the concepts of ODeL.

10. Which strategies or interventions would you consider being implemented at Unisa to support sustained learning?

- a) Have a hotline for first-year students' struggles.
- b) Have staff to assist first-year students
- c) Provide professional psychological help to assist the students in need.
- d) Conduct frequent tutorials.

- A) Provide reasons for your answer.

Because lots of students enrolling at Unisa are mostly recent high school leavers who are used to be taught by teachers thus, coming to an ODeL institution can be a lot challenging.

11. To what extent do you consider those strategies being helpful to ODeL students, particularly first-year students? Explain briefly.

Providing frequent tutorials to newcomers helps them to adapt to the ODeL tertiary institution. Through the experience of studying in ODeL they will know that their achievements are solely dependent on themselves than suddenly finding themselves to study on their own while some are from classroom settings.

I recommend ODeLs must have a department where they specifically deal with issues of first-year students and have a staff to assist students where necessary because the transition to distance learning may stress many students so the department to encourage and counsel such students

A hotline of first-year students' struggles will assist them to get information regarding the institution and services provided.